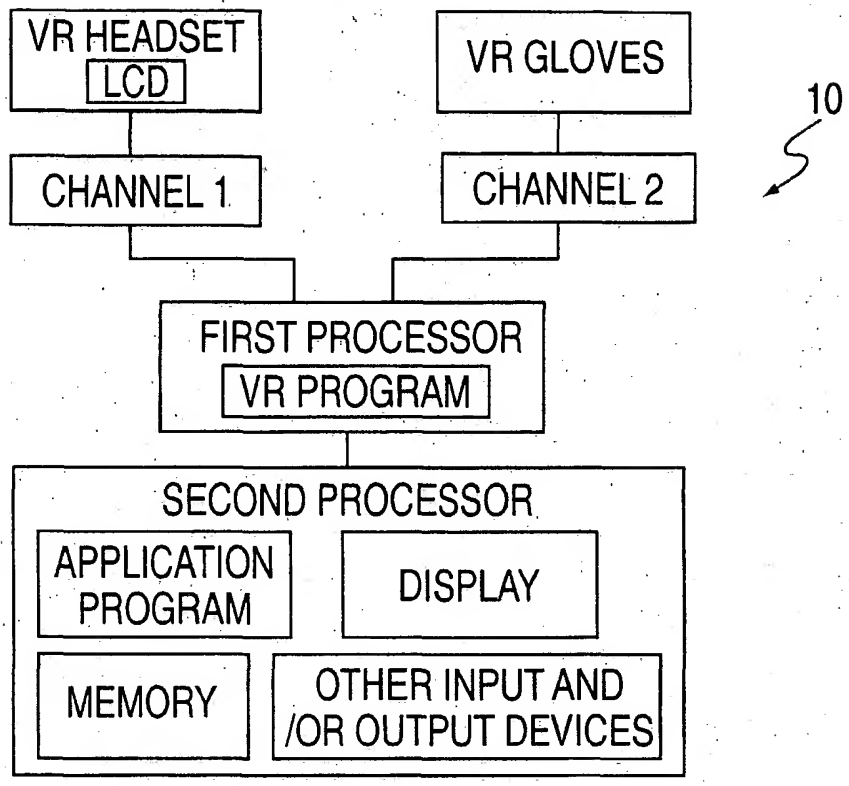
VR HEADSET
LCD
VR GLOVES
10
CHANNEL 1
CHANNEL 2
FIRST PROCESSOR
VR PROGRAM
SECOND PROCESSOR
APPLICATION PROGRAM
DISPLAY
MEMORY
OTHER INPUT AND /OR OUTPUT DEVICES

FIG. 1

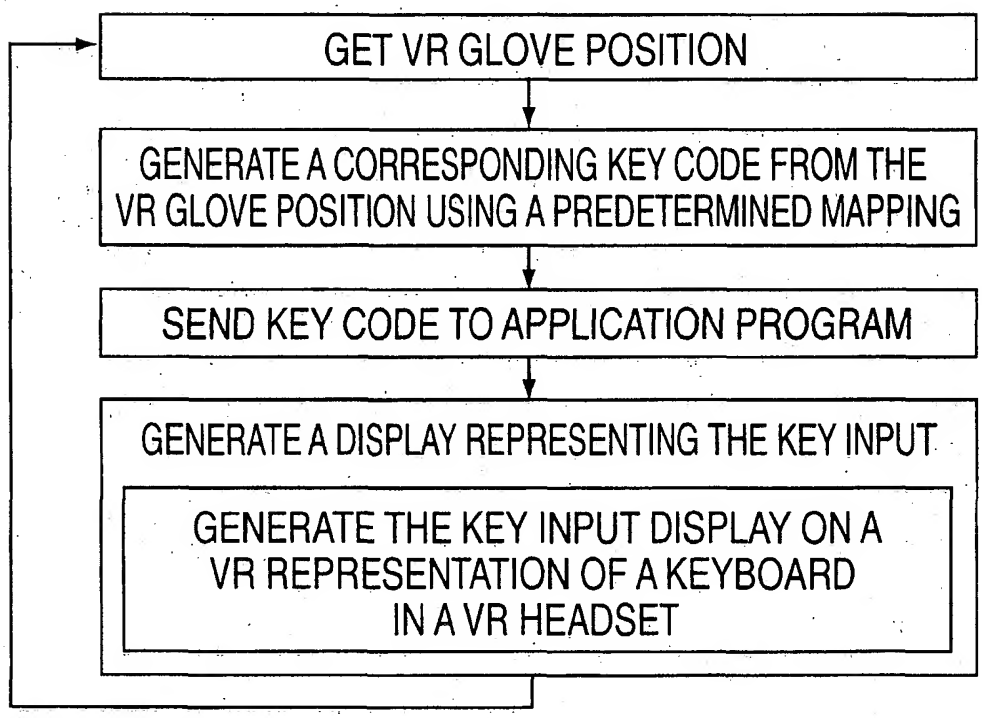
GET VR GLOVE POSITION
GENERATE A CORRESPONDING KEY CODE FROM THE VR GLOVE POSITION USING A PREDETERMINED MAPPING
SEND KEY CODE TO APPLICATION PROGRAM
GENERATE A DISPLAY REPRESENTING THE KEY INPUT
GENERATE THE KEY INPUT DISPLAY ON A VR REPRESENTATION OF A KEYBOARD IN A VR HEADSET

FIG. 4

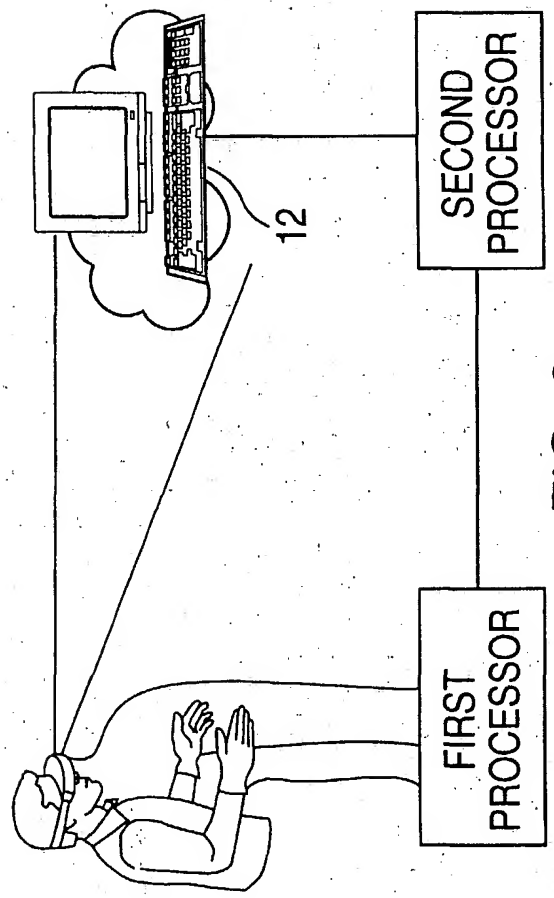
12
SECOND PROCESSOR
FIRST PROCESSOR

FIG. 2

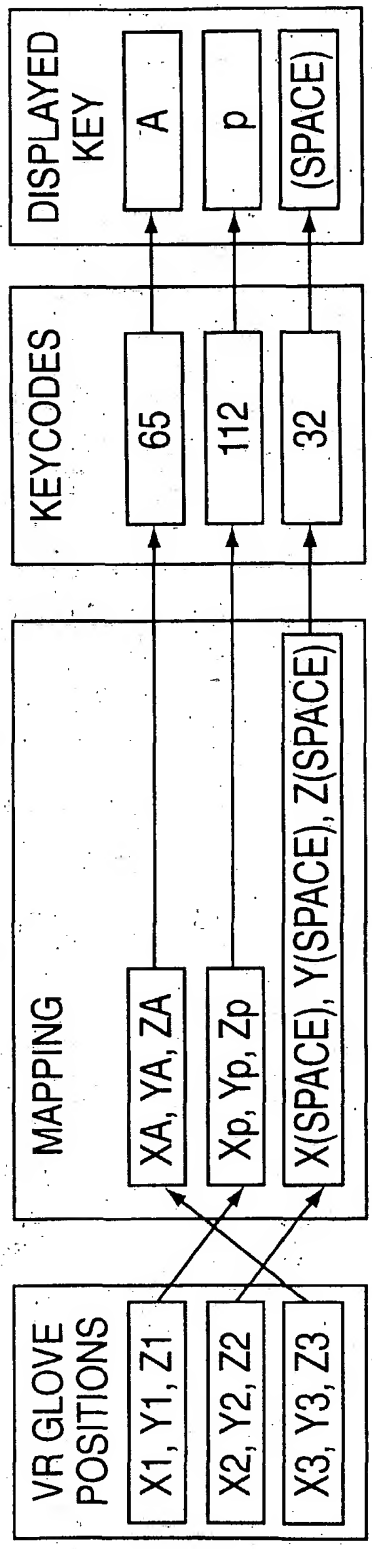
VR GLOVE POSITIONS
X1, Y1, Z1
X2, Y2, Z2
X3, Y3, Z3
MAPPING
XA, YA, ZA
Xp, Yp, Zp
X(SPACE), Y(SPACE), Z(SPACE)
KEYCODES
65
112
32
DISPLAYED KEY
A
p
(SPACE)

FIG. 3

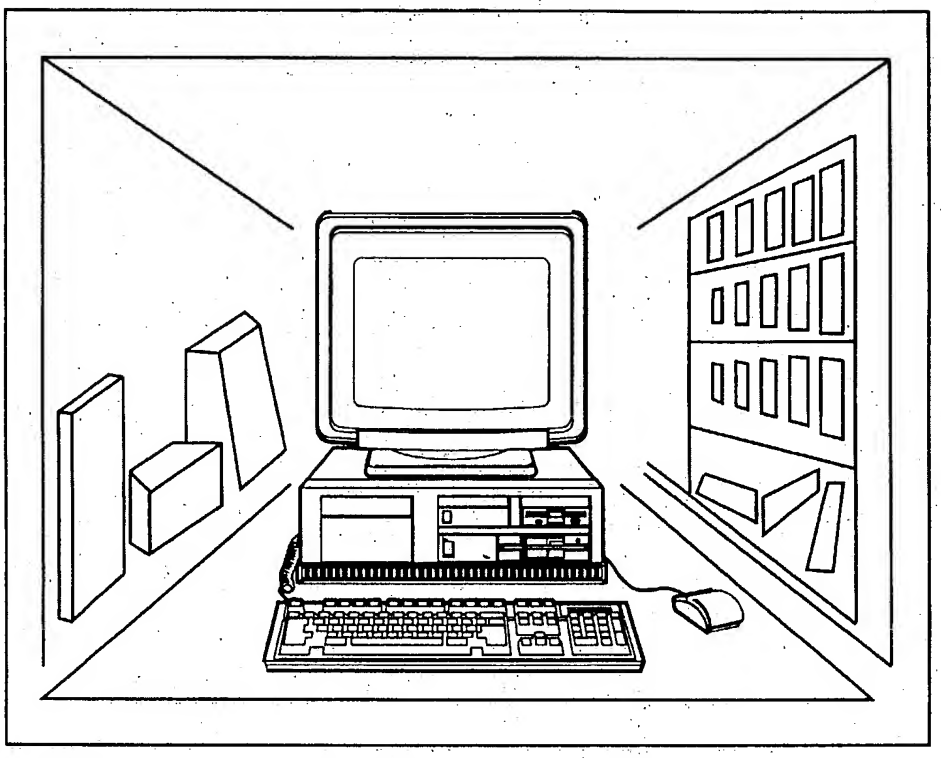

FIG. 5

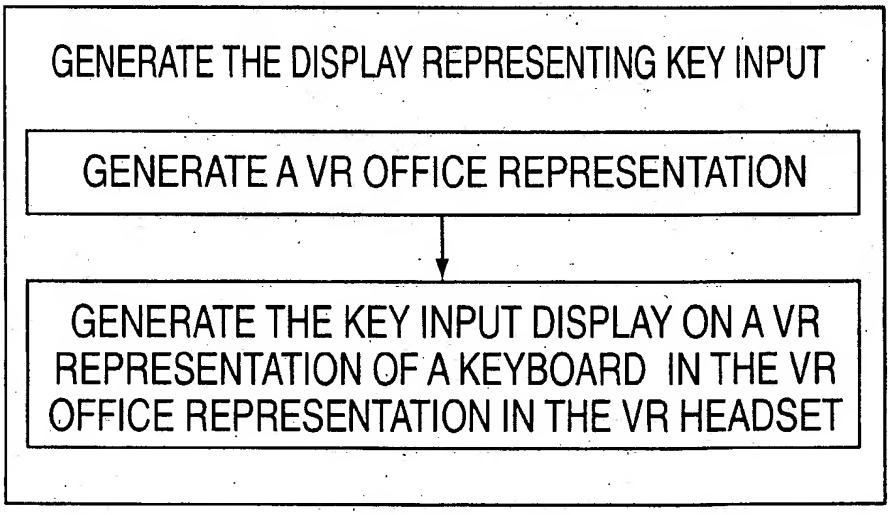
GENERATE THE DISPLAY REPRESENTING KEY INPUT
GENERATE A VR OFFICE REPRESENTATION
GENERATE THE KEY INPUT DISPLAY ON A VR REPRESENTATION OF A KEYBOARD IN THE VR OFFICE REPRESENTATION IN THE VR HEADSET

FIG. 6

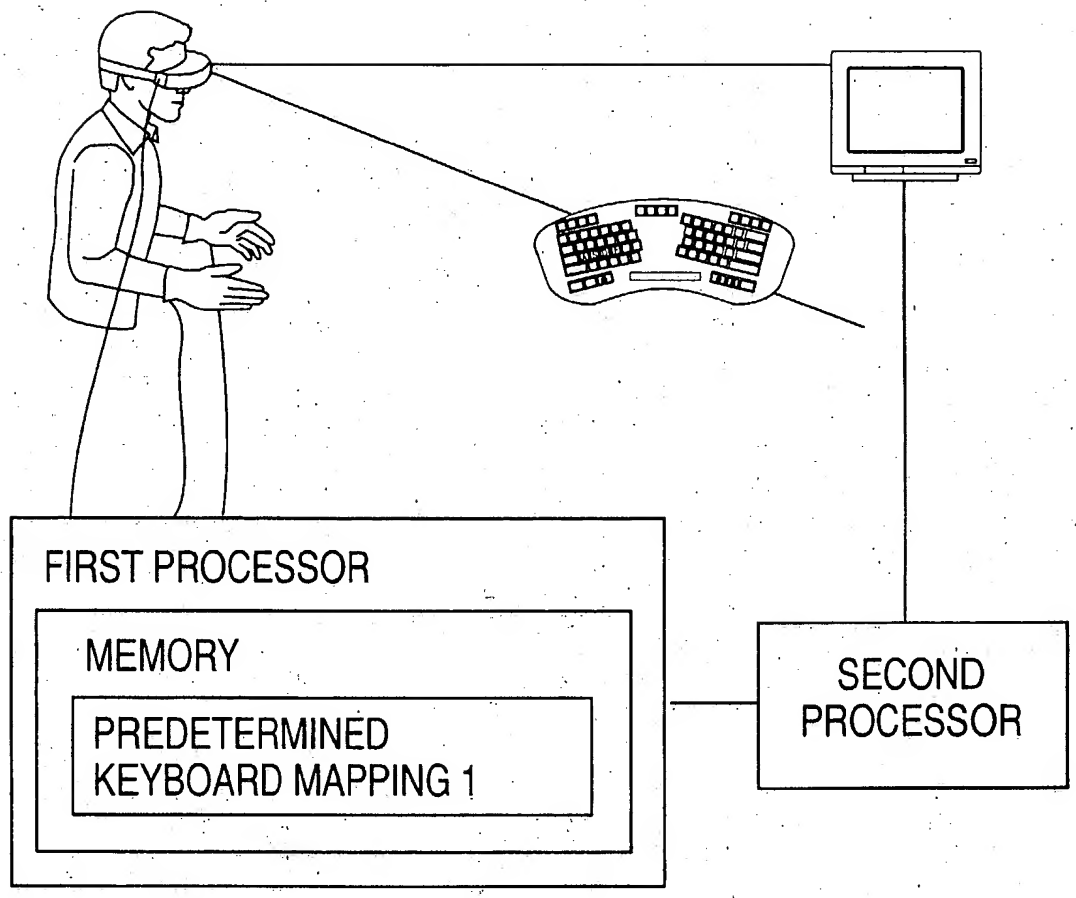
FIRST PROCESSOR
MEMORY
PREDETERMINED
KEYBOARD MAPPING 1
SECOND
PROCESSOR

FIG. 7

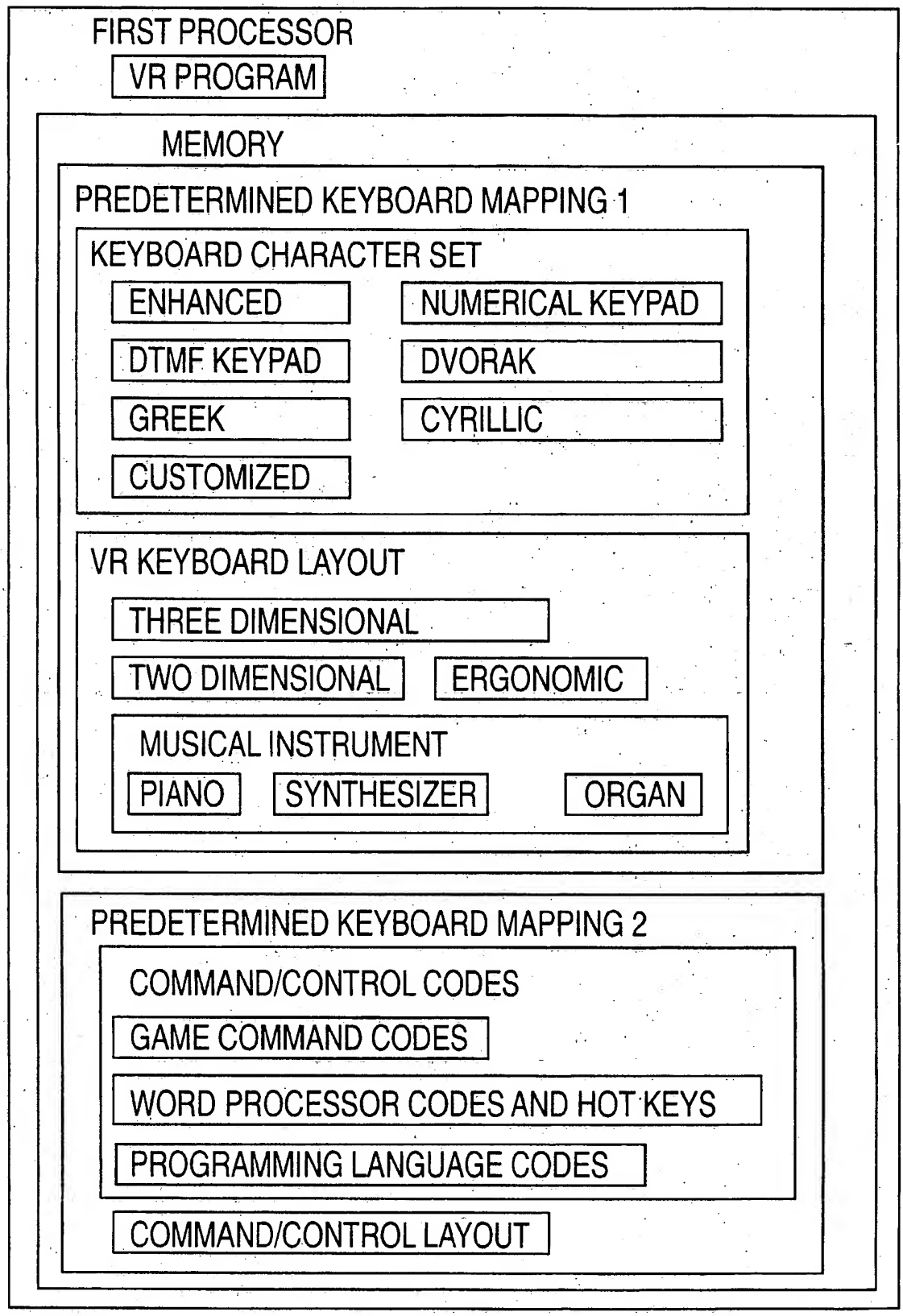
FIRST PROCESSOR
VR PROGRAM
MEMORY
PREDETERMINED KEYBOARD MAPPING 1
KEYBOARD CHARACTER SET
ENHANCED
NUMERICAL KEYPAD
DTMF KEYPAD
DVORAK
GREEK
CYRILLIC
CUSTOMIZED
VR KEYBOARD LAYOUT
THREE DIMENSIONAL
TWO DIMENSIONAL
ERGONOMIC
MUSICAL INSTRUMENT
PIANO
SYNTHESIZER
ORGAN
PREDETERMINED KEYBOARD MAPPING 2
COMMAND/CONTROL CODES
GAME COMMAND CODES
WORD PROCESSOR CODES AND HOT KEYS
PROGRAMMING LANGUAGE CODES
COMMAND/CONTROL LAYOUT

FIG. 8

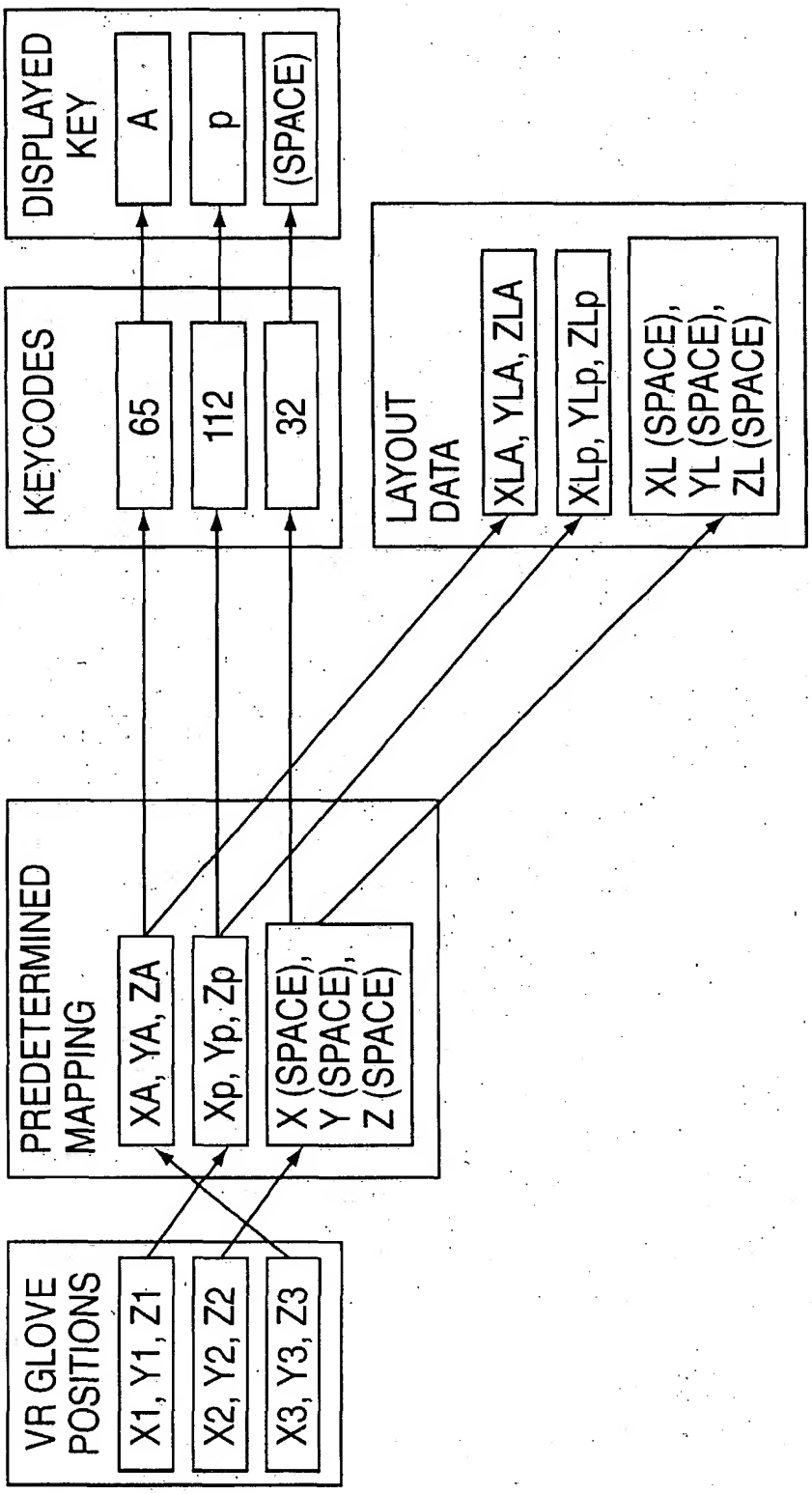
VR GLOVE POSITIONS
X1, Y1, Z1
X2, Y2, Z2
X3, Y3, Z3
PREDETERMINED MAPPING
XA, YA, ZA
Xp, Yp, Zp
X (SPACE), Y (SPACE), Z (SPACE)
KEYCODES
65
112
32
LAYOUT DATA
XLA, YLA, ZLA
XLp, YLp, ZLp
XL (SPACE), YL (SPACE), ZL (SPACE)
DISPLAYED KEY
A
p
(SPACE)

FIG. 9

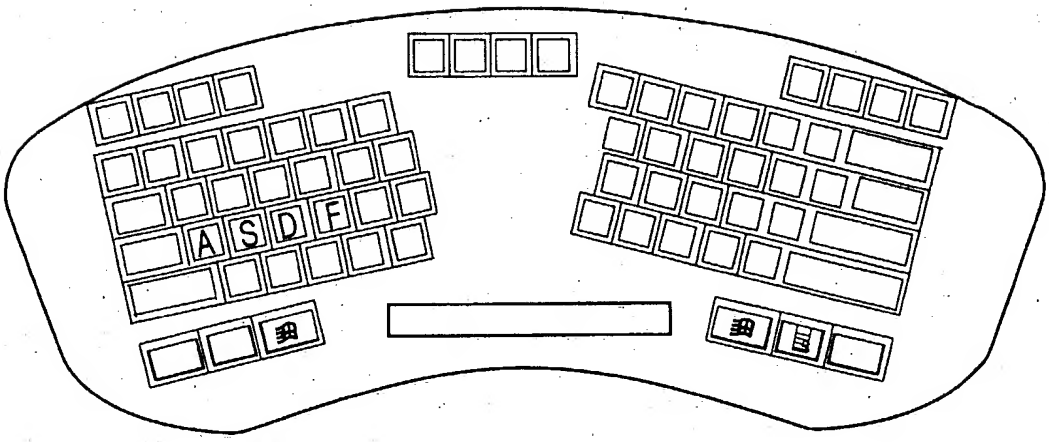

FIG. 10

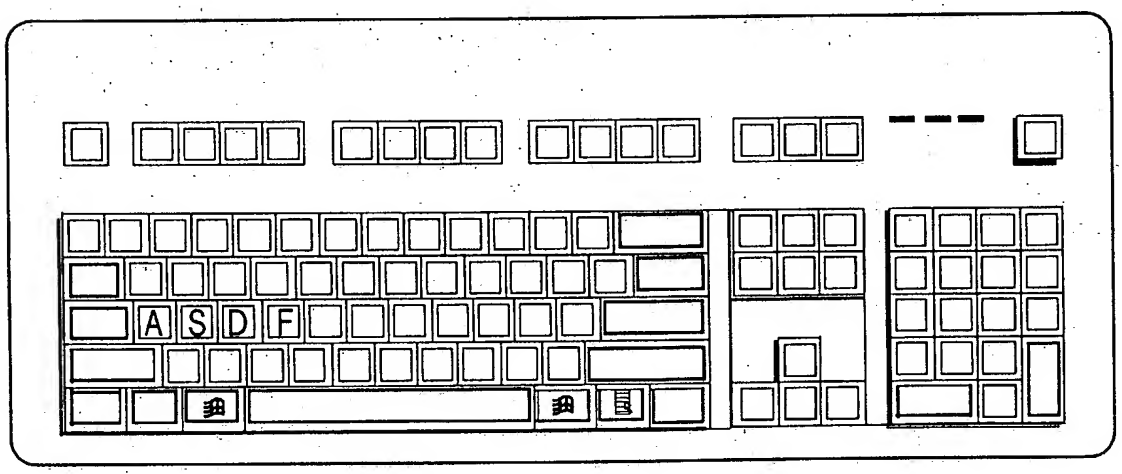

FIG. 11

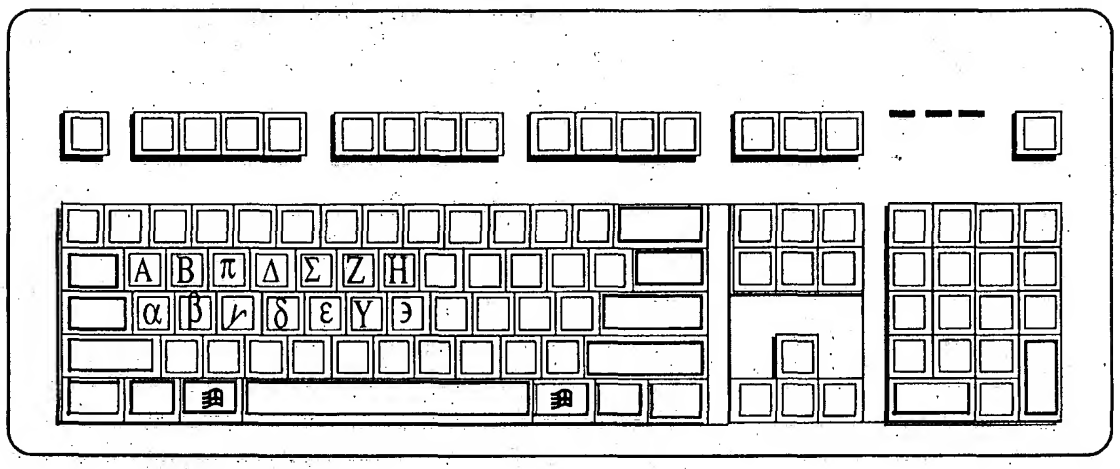

FIG. 12

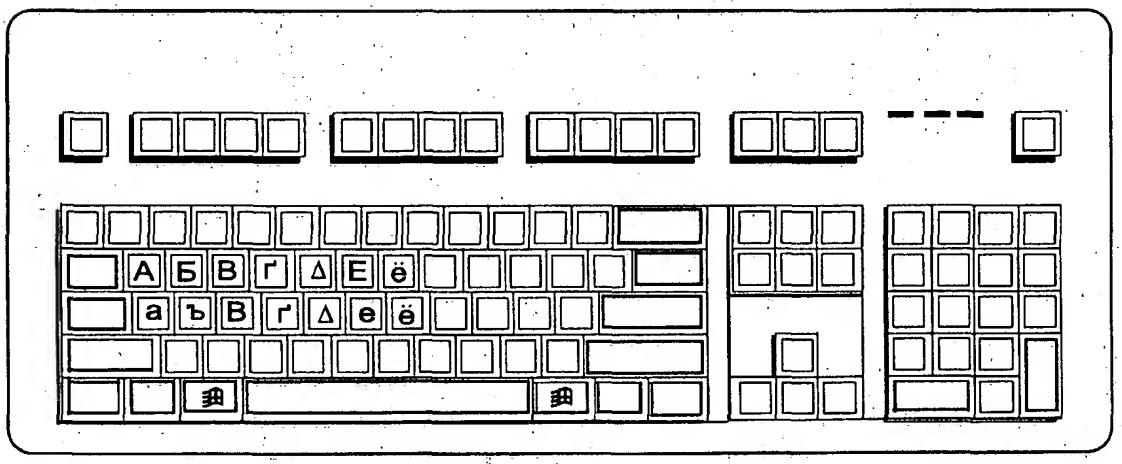

FIG. 13

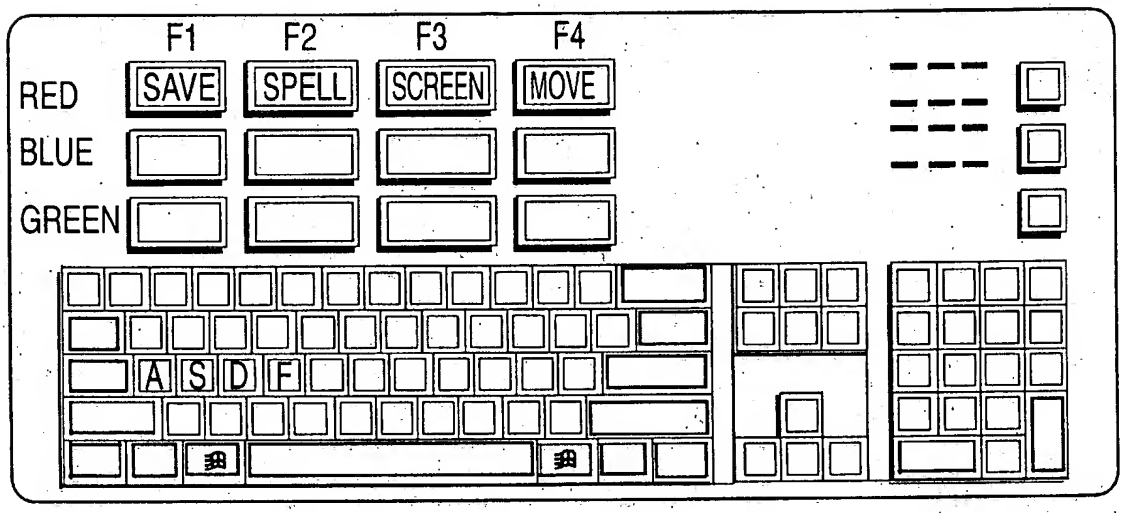
F1
F2
F3
F4
RED
SAVE
SPELL
SCREEN
MOVE
BLUE
GREEN
A S D F

FIG. 14

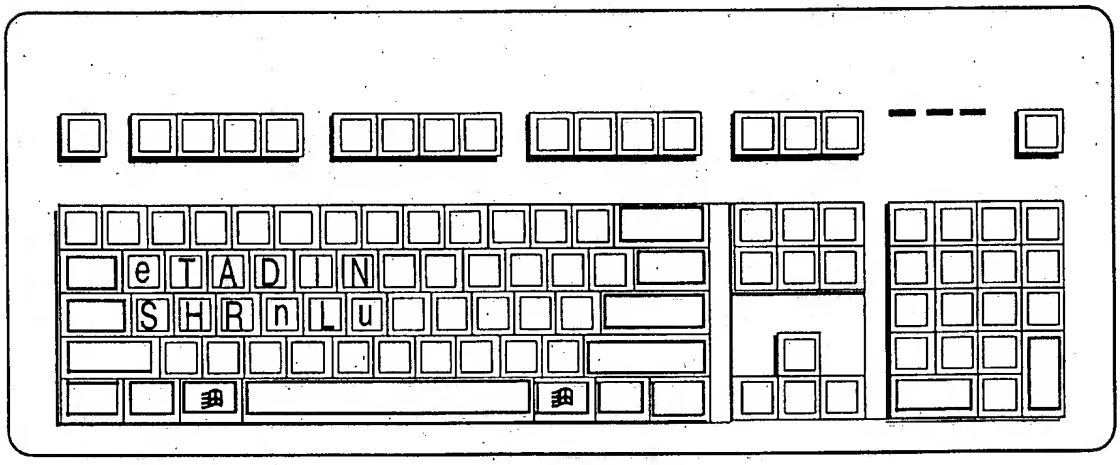
e T A D I N
S H R n L u

FIG. 15

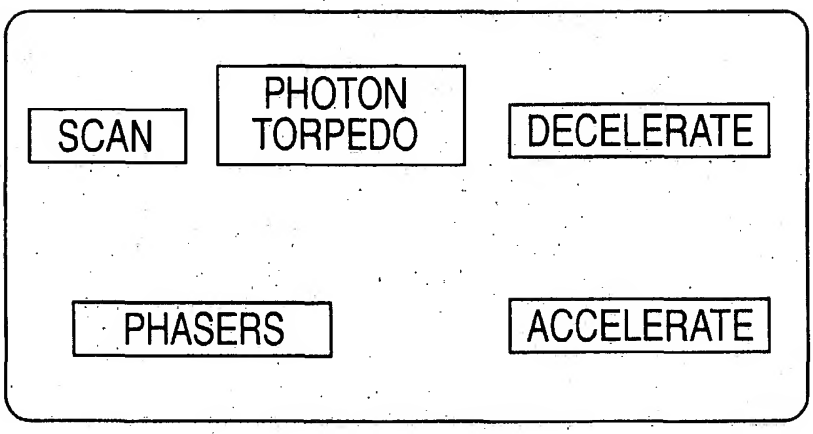

FIG. 16

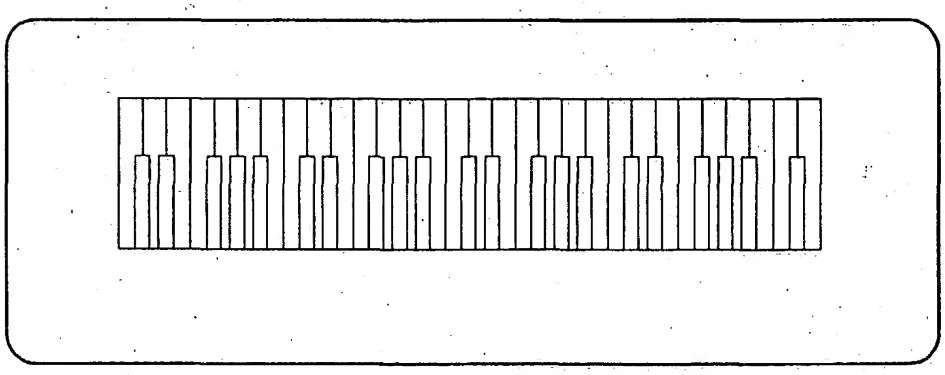

FIG. 17

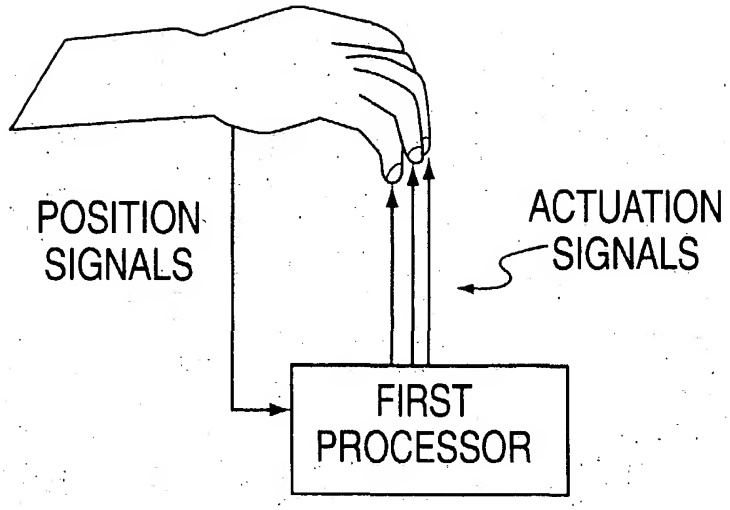
POSITION
SIGNALS
ACTUATION
SIGNALS
FIRST
PROCESSOR

FIG. 18

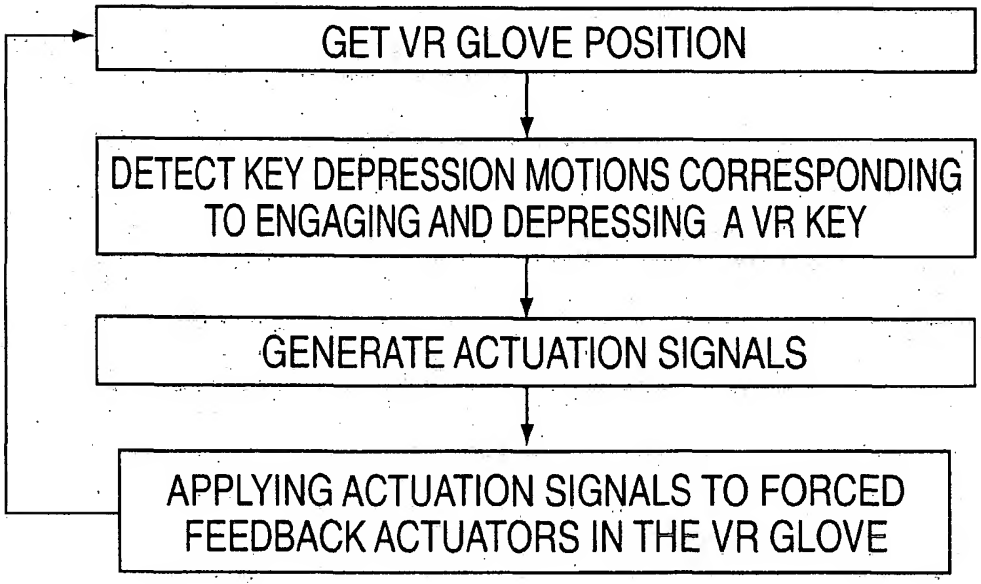
GET VR GLOVE POSITION
DETECT KEY DEPRESSION MOTIONS CORRESPONDING TO ENGAGING AND DEPRESSING A VR KEY
GENERATE ACTUATION SIGNALS
APPLYING ACTUATION SIGNALS TO FORCED FEEDBACK ACTUATORS IN THE VR GLOVE

FIG. 19

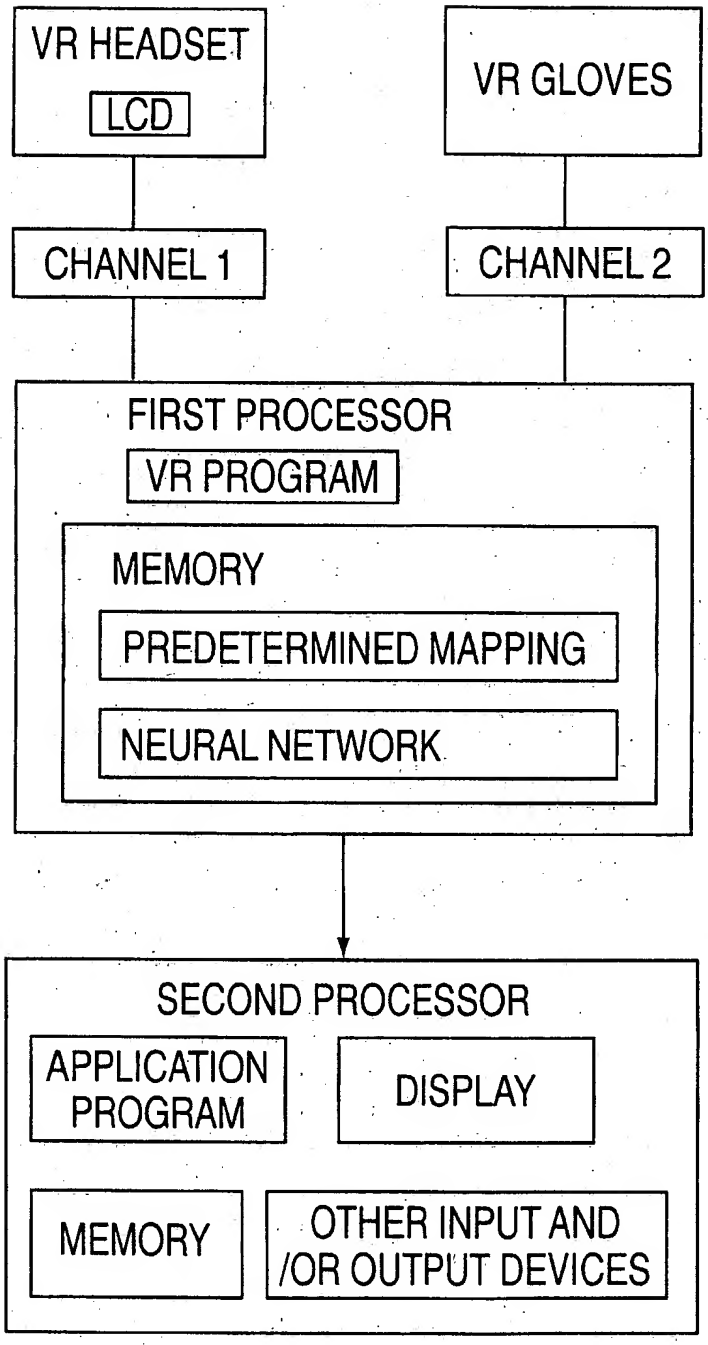
VR HEADSET
LCD
VR GLOVES
CHANNEL 1
CHANNEL 2
FIRST PROCESSOR
VR PROGRAM
MEMORY
PREDETERMINED MAPPING
NEURAL NETWORK
SECOND PROCESSOR
APPLICATION PROGRAM
DISPLAY
MEMORY
OTHER INPUT AND /OR OUTPUT DEVICES

FIG. 20

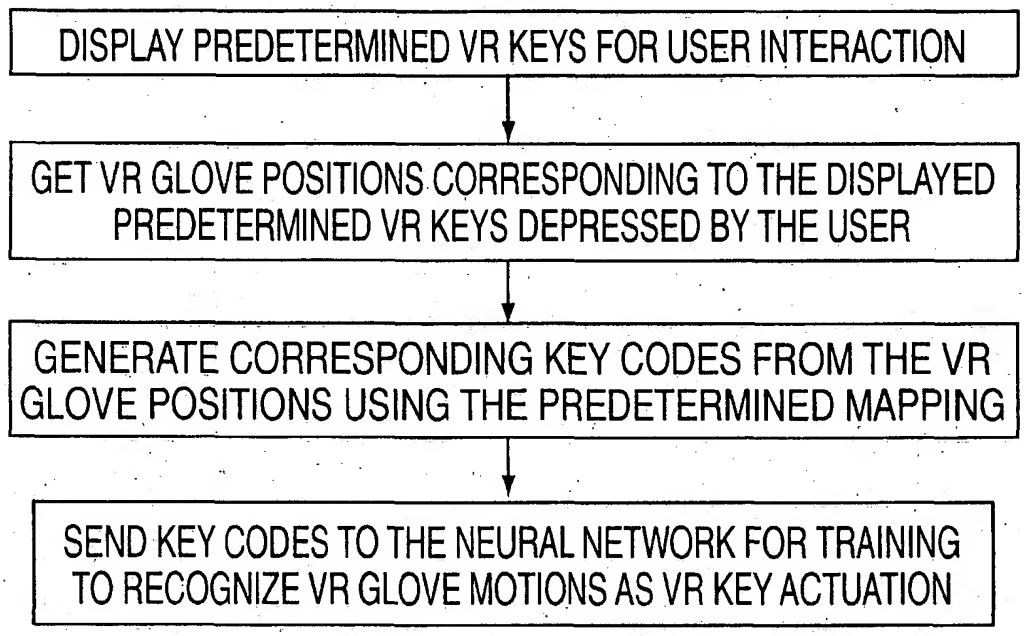
DISPLAY PREDETERMINED VR KEYS FOR USER INTERACTION
GET VR GLOVE POSITIONS CORRESPONDING TO THE DISPLAYED PREDETERMINED VR KEYS DEPRESSED BY THE USER
GENERATE CORRESPONDING KEY CODES FROM THE VR GLOVE POSITIONS USING THE PREDETERMINED MAPPING
SEND KEY CODES TO THE NEURAL NETWORK FOR TRAINING TO RECOGNIZE VR GLOVE MOTIONS AS VR KEY ACTUATION

FIG. 21

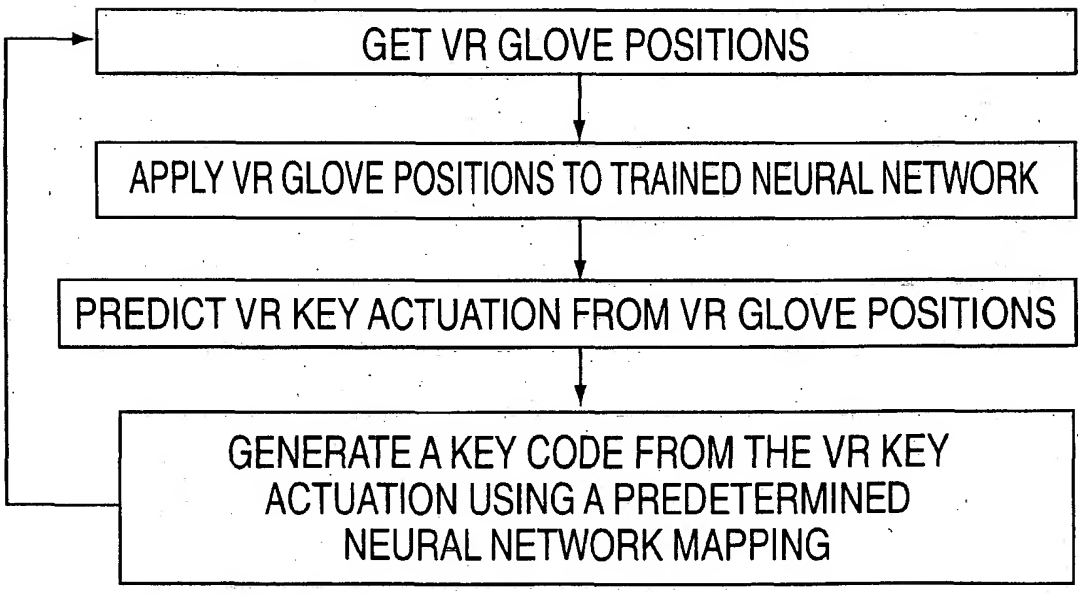
GET VR GLOVE POSITIONS
APPLY VR GLOVE POSITIONS TO TRAINED NEURAL NETWORK
PREDICT VR KEY ACTUATION FROM VR GLOVE POSITIONS
GENERATE A KEY CODE FROM THE VR KEY ACTUATION USING A PREDETERMINED NEURAL NETWORK MAPPING

FIG. 22

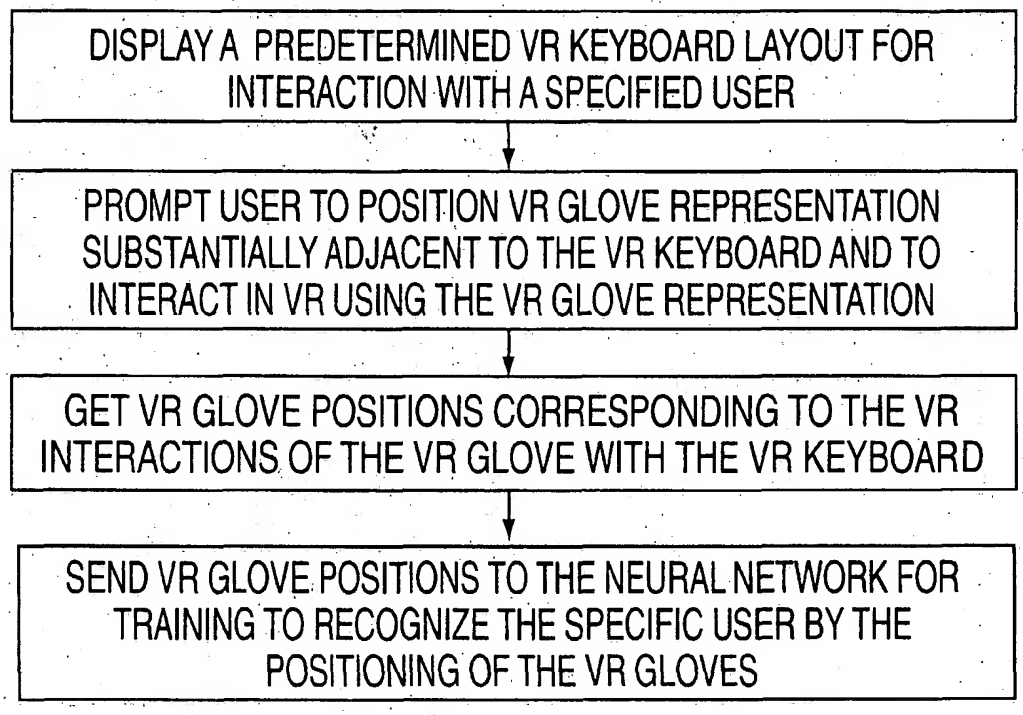
DISPLAY A PREDETERMINED VR KEYBOARD LAYOUT FOR INTERACTION WITH A SPECIFIED USER
PROMPT USER TO POSITION VR GLOVE REPRESENTATION SUBSTANTIALLY ADJACENT TO THE VR KEYBOARD AND TO INTERACT IN VR USING THE VR GLOVE REPRESENTATION
GET VR GLOVE POSITIONS CORRESPONDING TO THE VR INTERACTIONS OF THE VR GLOVE WITH THE VR KEYBOARD
SEND VR GLOVE POSITIONS TO THE NEURAL NETWORK FOR TRAINING TO RECOGNIZE THE SPECIFIC USER BY THE POSITIONING OF THE VR GLOVES

FIG. 23

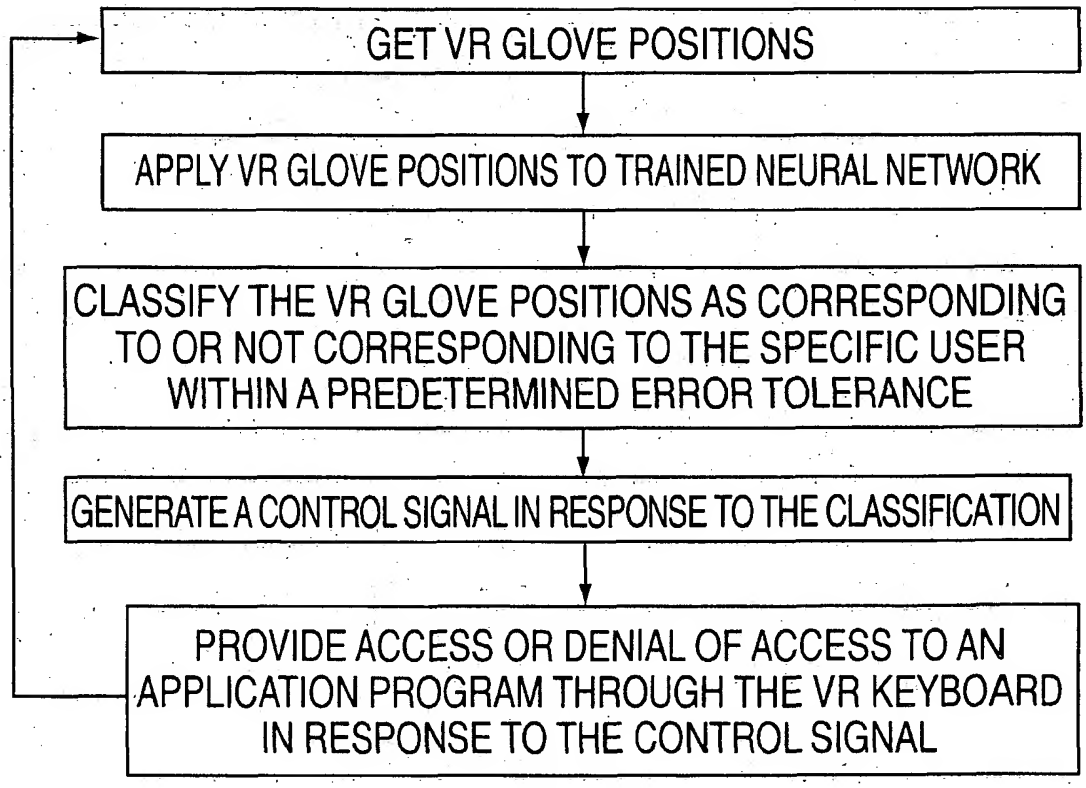
GET VR GLOVE POSITIONS
APPLY VR GLOVE POSITIONS TO TRAINED NEURAL NETWORK
CLASSIFY THE VR GLOVE POSITIONS AS CORRESPONDING TO OR NOT CORRESPONDING TO THE SPECIFIC USER WITHIN A PREDETERMINED ERROR TOLERANCE
GENERATE A CONTROL SIGNAL IN RESPONSE TO THE CLASSIFICATION
PROVIDE ACCESS OR DENIAL OF ACCESS TO AN APPLICATION PROGRAM THROUGH THE VR KEYBOARD IN RESPONSE TO THE CONTROL SIGNAL

FIG. 24

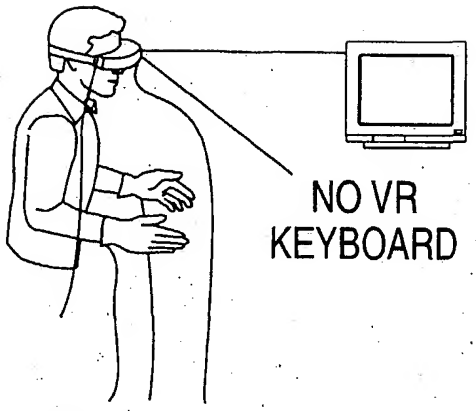

FIG. 25

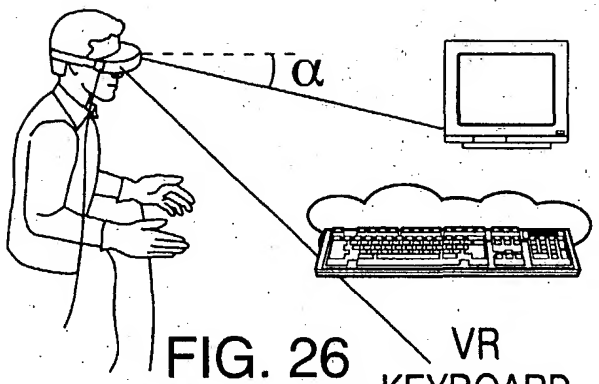

FIG. 26

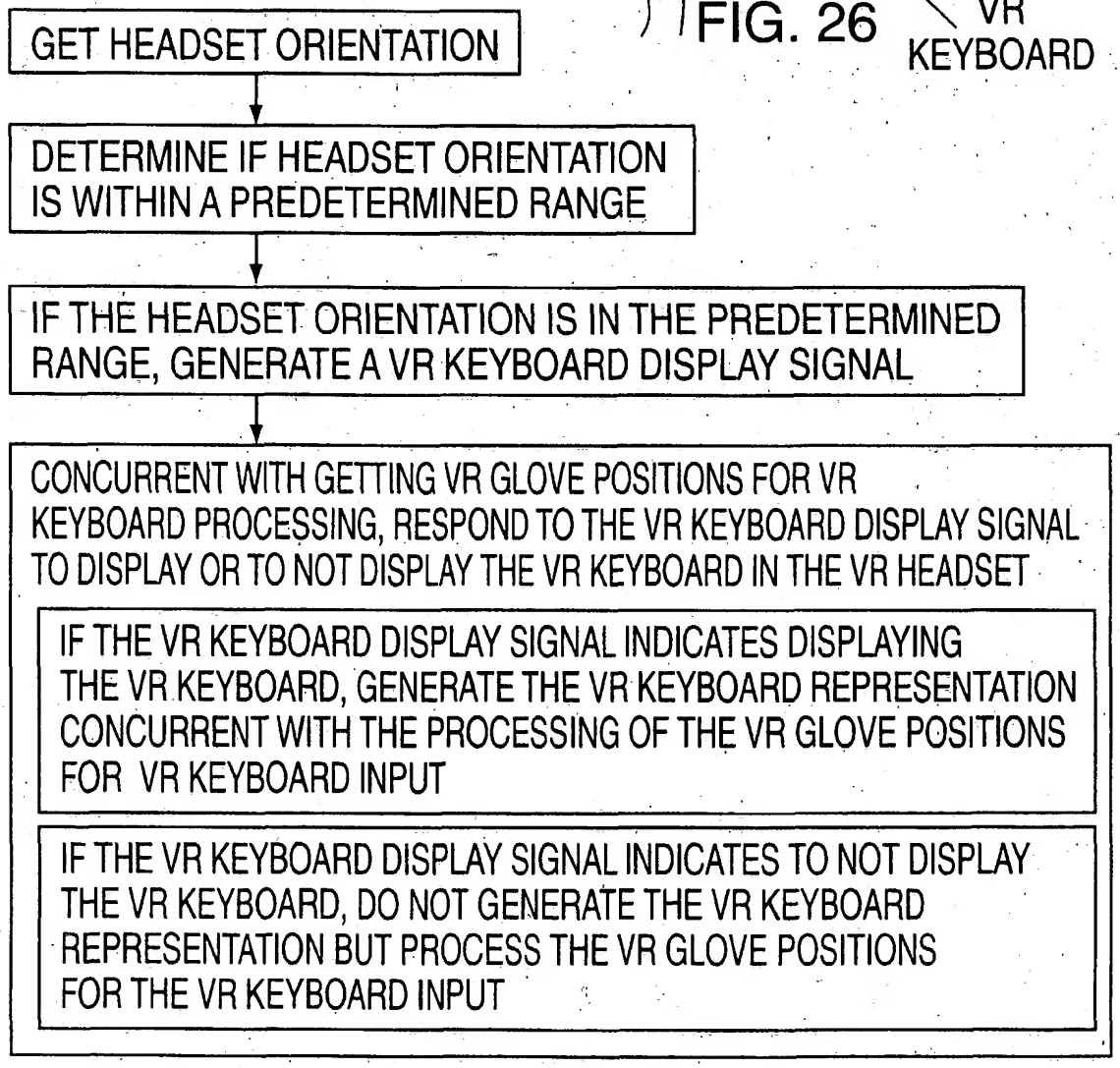

FIG. 27

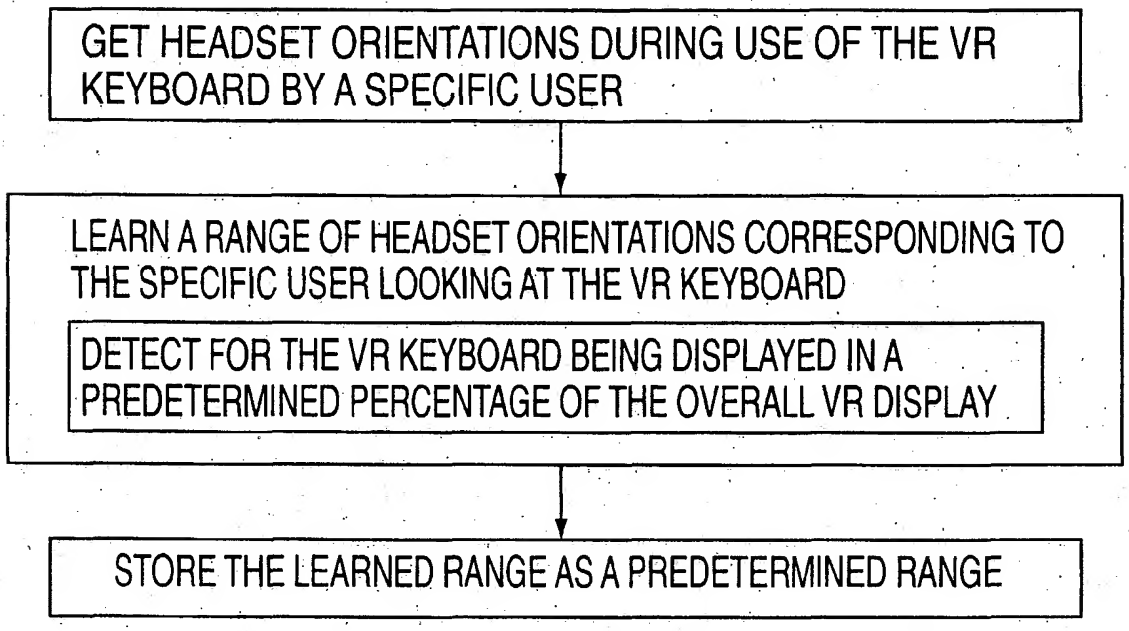
GET HEADSET ORIENTATIONS DURING USE OF THE VR KEYBOARD BY A SPECIFIC USER
LEARN A RANGE OF HEADSET ORIENTATIONS CORRESPONDING TO THE SPECIFIC USER LOOKING AT THE VR KEYBOARD
DETECT FOR THE VR KEYBOARD BEING DISPLAYED IN A PREDETERMINED PERCENTAGE OF THE OVERALL VR DISPLAY
STORE THE LEARNED RANGE AS A PREDETERMINED RANGE

FIG. 28

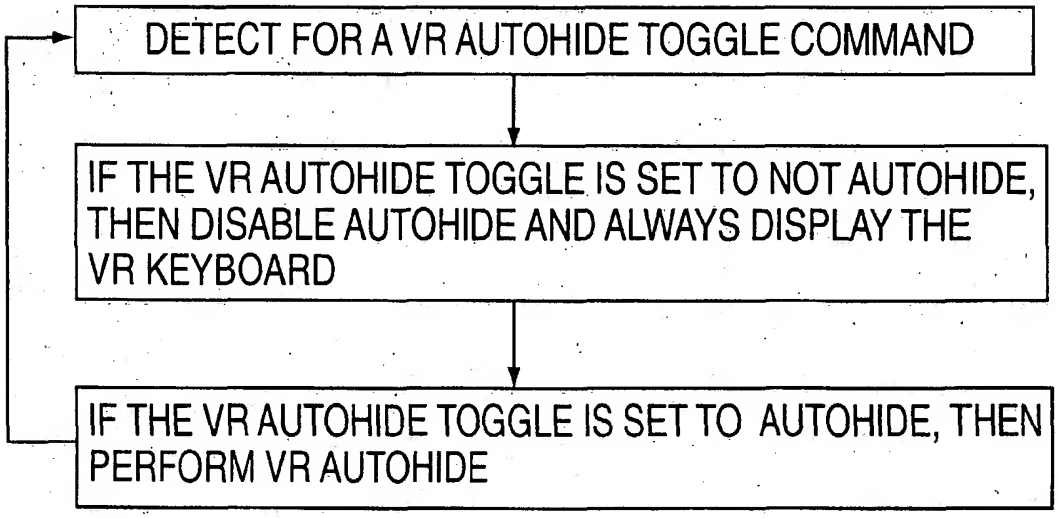
DETECT FOR A VR AUTOHIDE TOGGLE COMMAND
IF THE VR AUTOHIDE TOGGLE IS SET TO NOT AUTOHIDE, THEN DISABLE AUTOHIDE AND ALWAYS DISPLAY THE VR KEYBOARD
IF THE VR AUTOHIDE TOGGLE IS SET TO AUTOHIDE, THEN PERFORM VR AUTOHIDE

FIG. 29

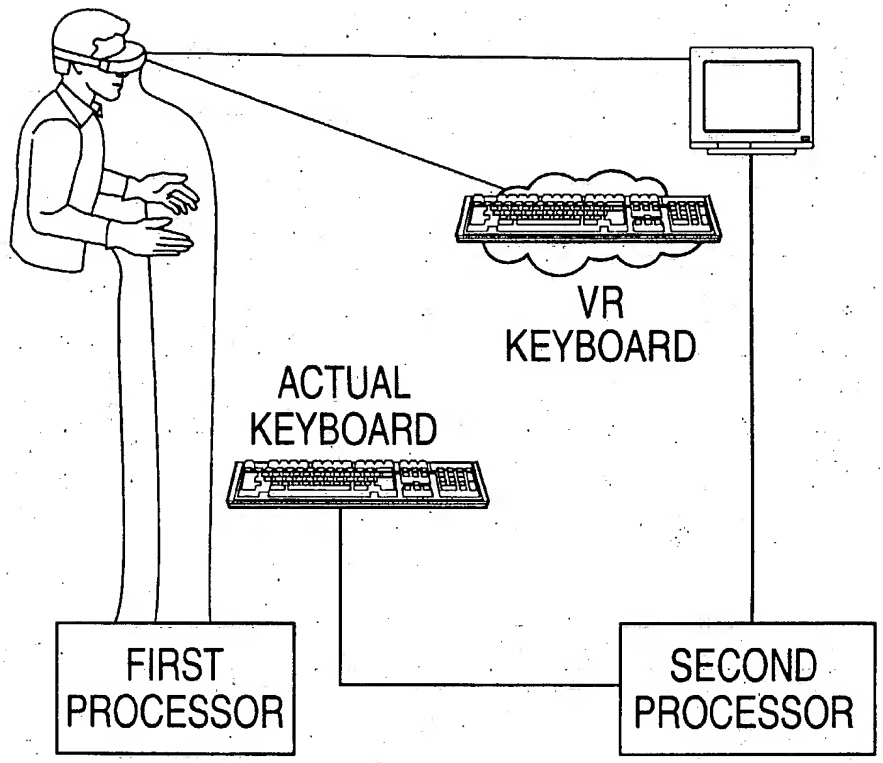
VR
KEYBOARD
ACTUAL
KEYBOARD
FIRST
PROCESSOR
SECOND
PROCESSOR

FIG. 30

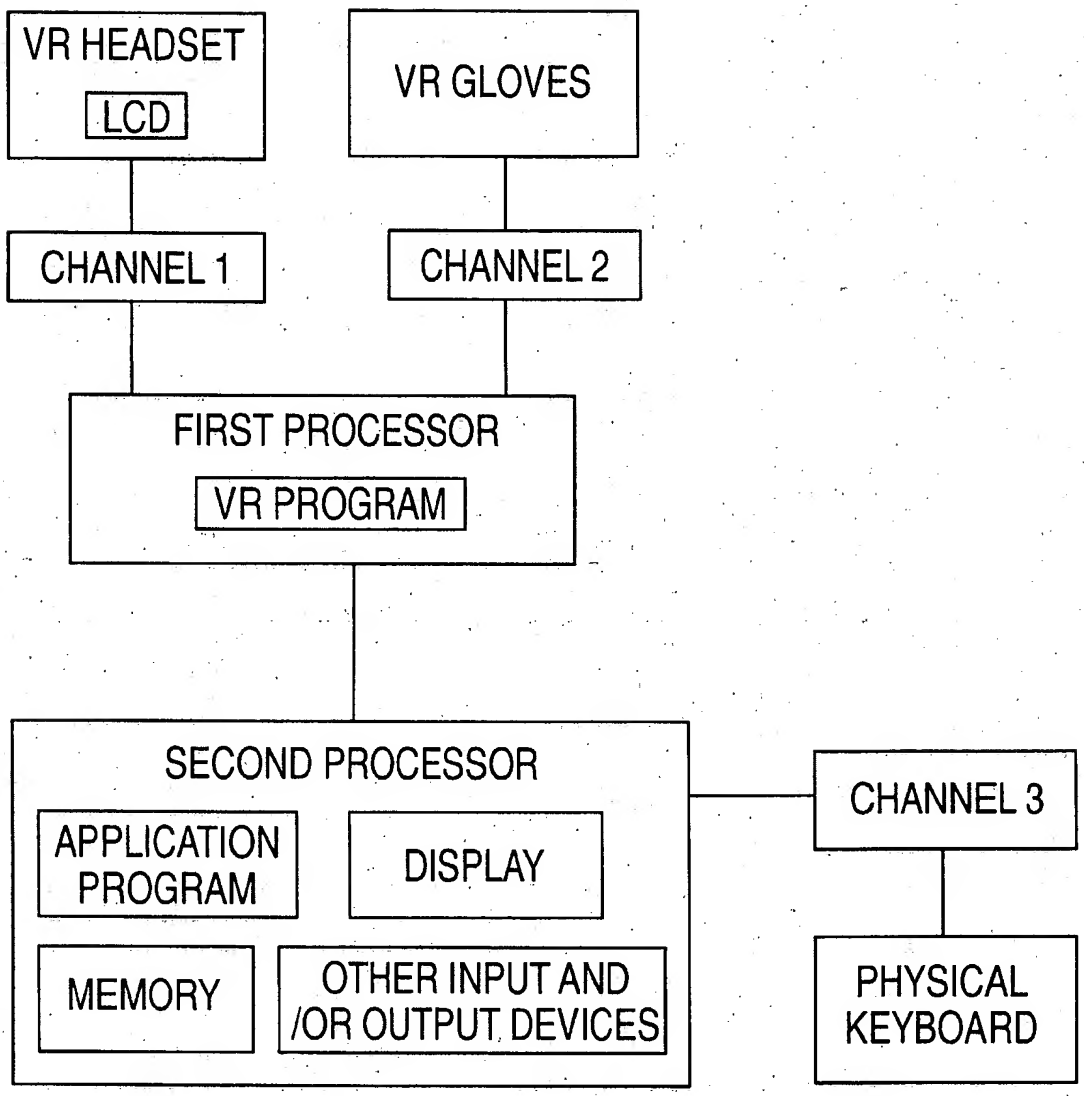
VR HEADSET
LCD
VR GLOVES
CHANNEL 1
CHANNEL 2
FIRST PROCESSOR
VR PROGRAM
SECOND PROCESSOR
APPLICATION PROGRAM
DISPLAY
MEMORY
OTHER INPUT AND /OR OUTPUT DEVICES
CHANNEL 3
PHYSICAL KEYBOARD

FIG. 31

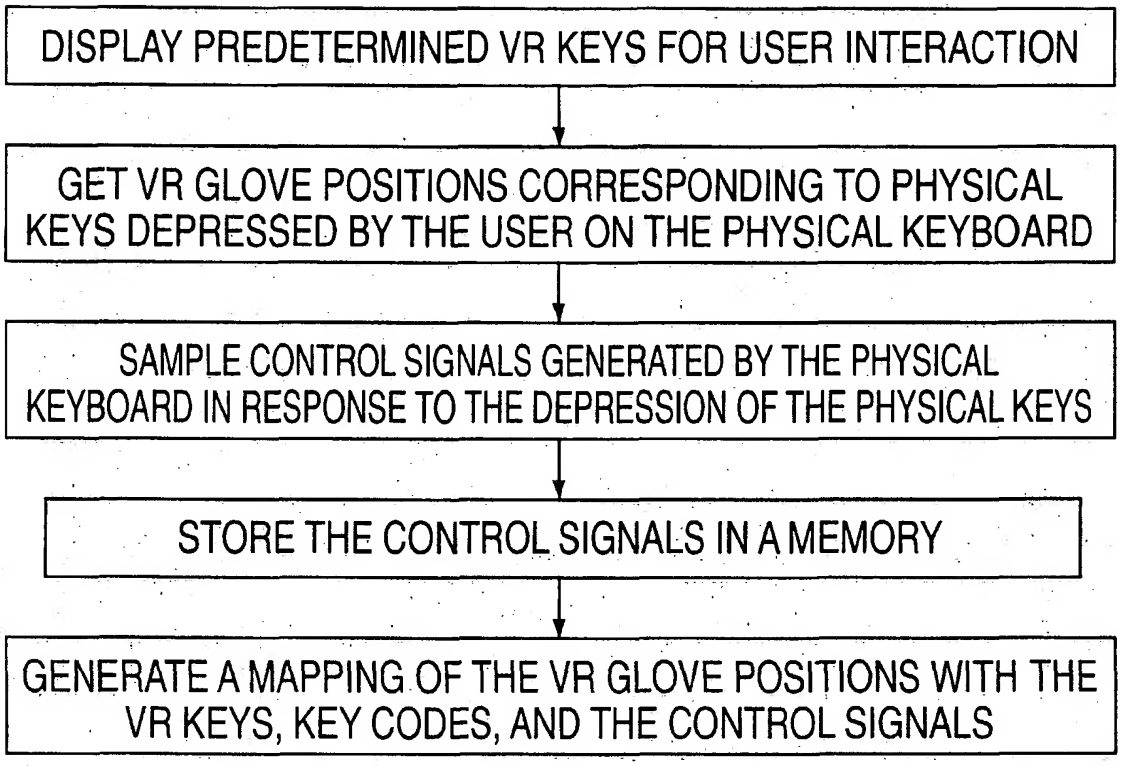
DISPLAY PREDETERMINED VR KEYS FOR USER INTERACTION
GET VR GLOVE POSITIONS CORRESPONDING TO PHYSICAL KEYS DEPRESSED BY THE USER ON THE PHYSICAL KEYBOARD
SAMPLE CONTROL SIGNALS GENERATED BY THE PHYSICAL KEYBOARD IN RESPONSE TO THE DEPRESSION OF THE PHYSICAL KEYS
STORE THE CONTROL SIGNALS IN A MEMORY
GENERATE A MAPPING OF THE VR GLOVE POSITIONS WITH THE VR KEYS, KEY CODES, AND THE CONTROL SIGNALS

FIG. 32

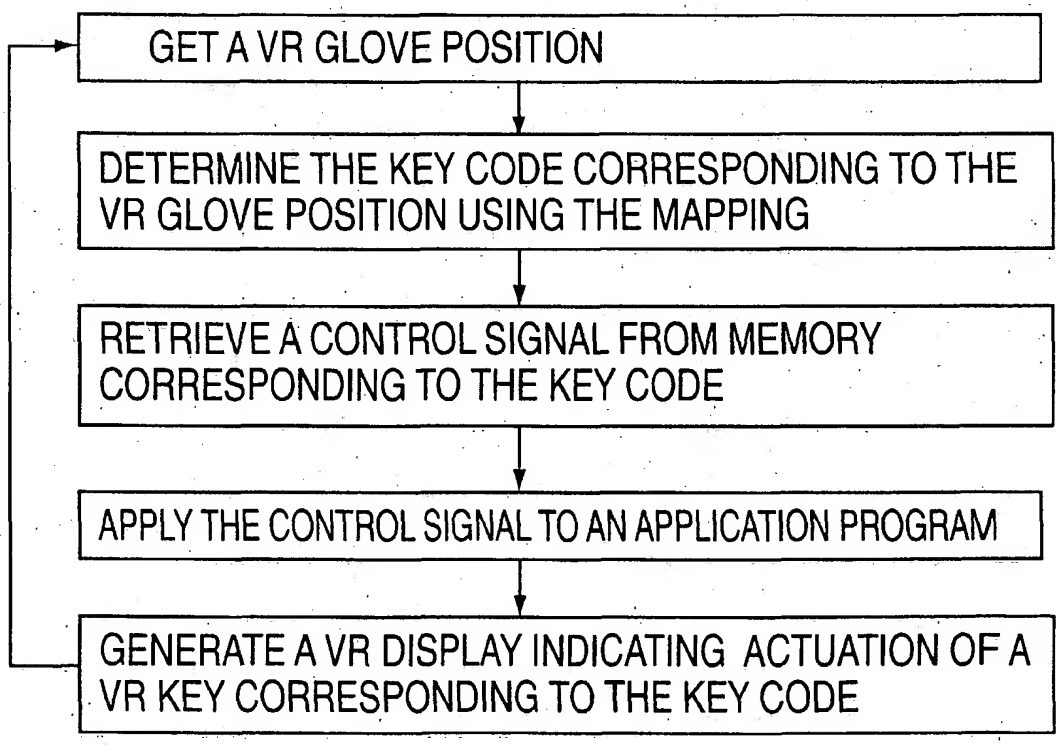
GET A VR GLOVE POSITION
DETERMINE THE KEY CODE CORRESPONDING TO THE VR GLOVE POSITION USING THE MAPPING
RETRIEVE A CONTROL SIGNAL FROM MEMORY CORRESPONDING TO THE KEY CODE
APPLY THE CONTROL SIGNAL TO AN APPLICATION PROGRAM
GENERATE A VR DISPLAY INDICATING ACTUATION OF A VR KEY CORRESPONDING TO THE KEY CODE

FIG. 33

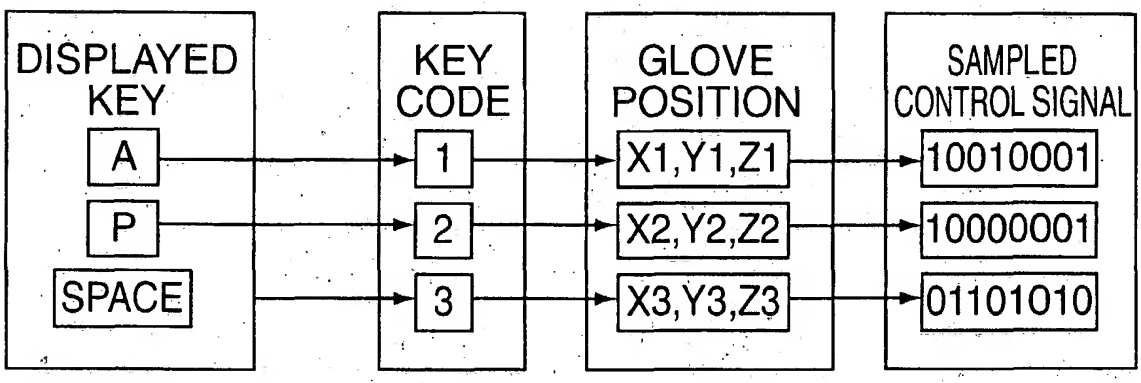

FIG. 34

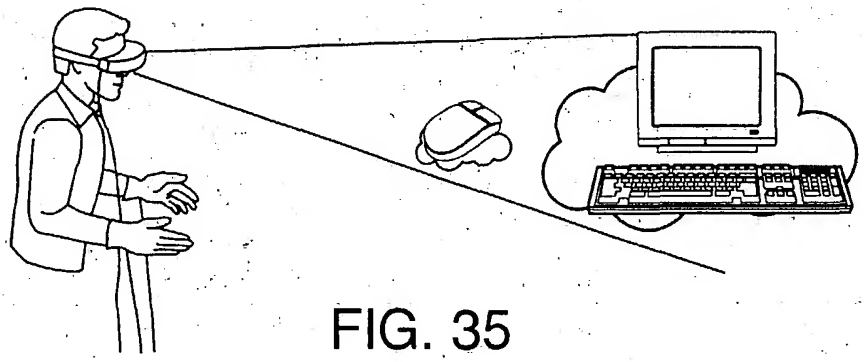

FIG. 35

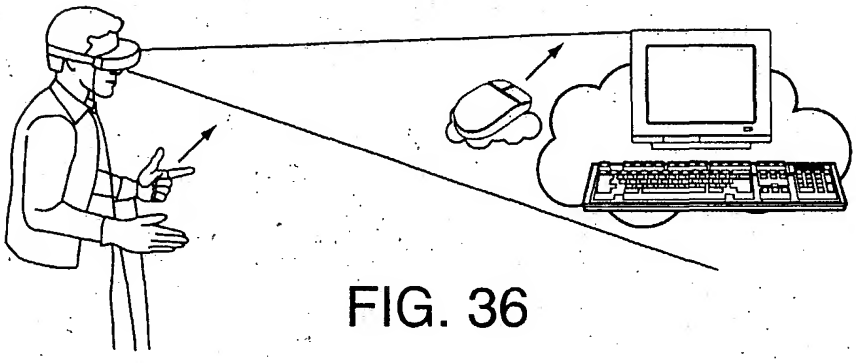

FIG. 36

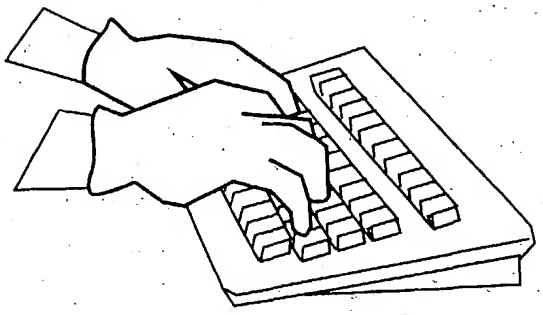

FIG. 37

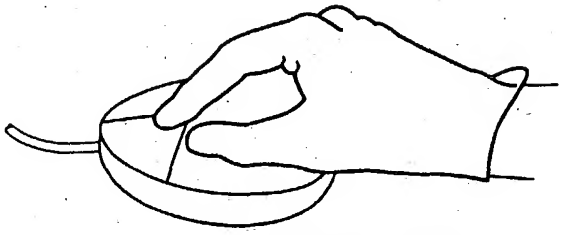

FIG. 38

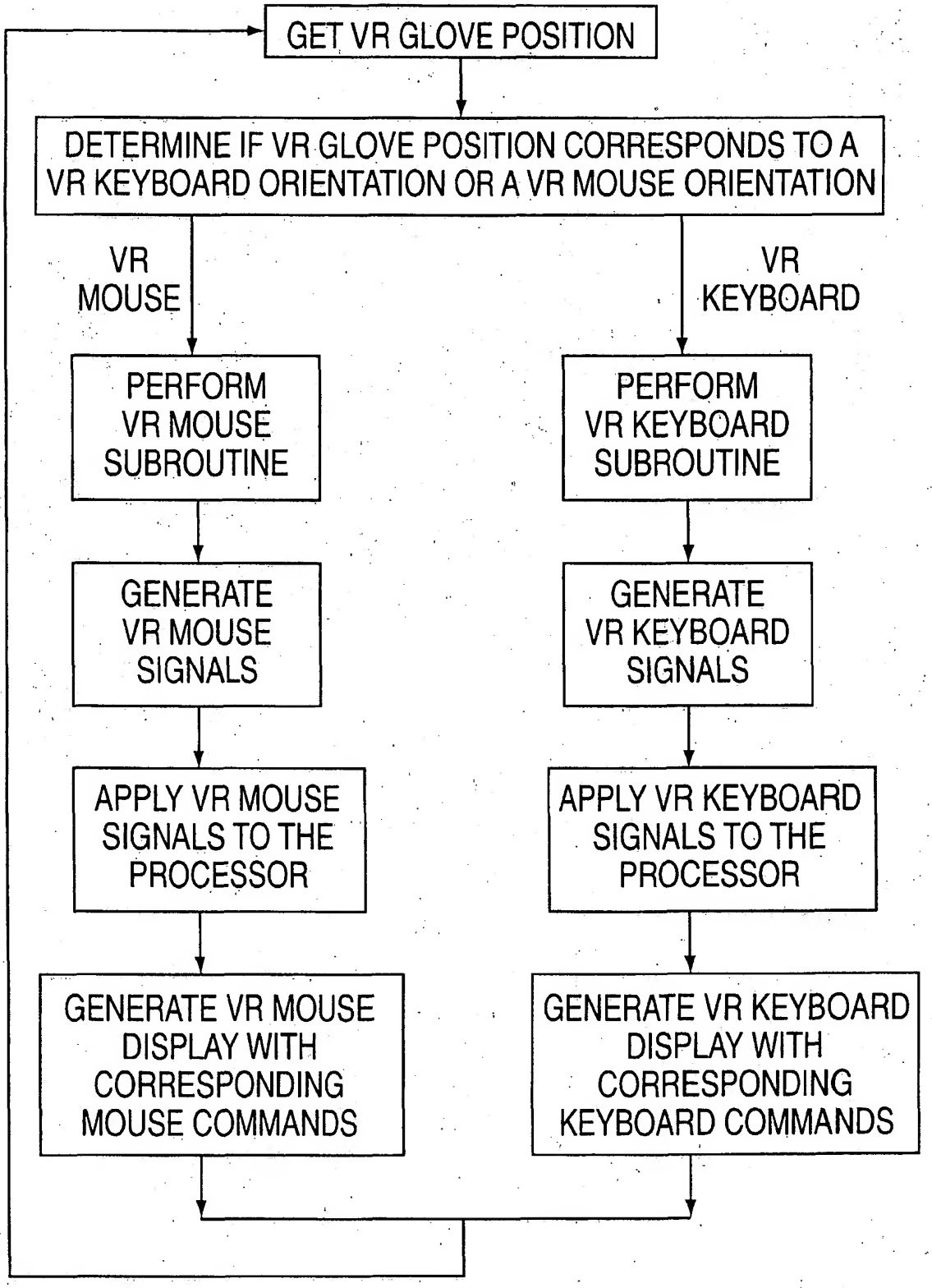
GET VR GLOVE POSITION
DETERMINE IF VR GLOVE POSITION CORRESPONDS TO A VR KEYBOARD ORIENTATION OR A VR MOUSE ORIENTATION
VR MOUSE
VR KEYBOARD
PERFORM VR MOUSE SUBROUTINE
PERFORM VR KEYBOARD SUBROUTINE
GENERATE VR MOUSE SIGNALS
GENERATE VR KEYBOARD SIGNALS
APPLY VR MOUSE SIGNALS TO THE PROCESSOR
APPLY VR KEYBOARD SIGNALS TO THE PROCESSOR
GENERATE VR MOUSE DISPLAY WITH CORRESPONDING MOUSE COMMANDS
GENERATE VR KEYBOARD DISPLAY WITH CORRESPONDING KEYBOARD COMMANDS

FIG. 39

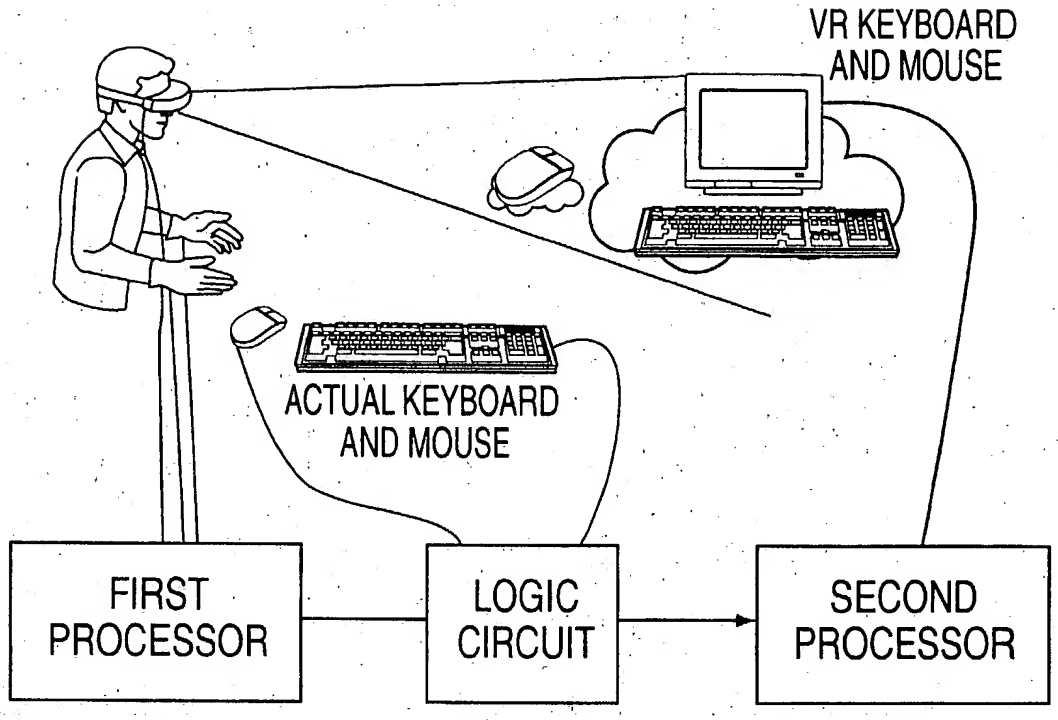
VR KEYBOARD
AND MOUSE
ACTUAL KEYBOARD
AND MOUSE
FIRST
PROCESSOR
LOGIC
CIRCUIT
SECOND
PROCESSOR

FIG. 40

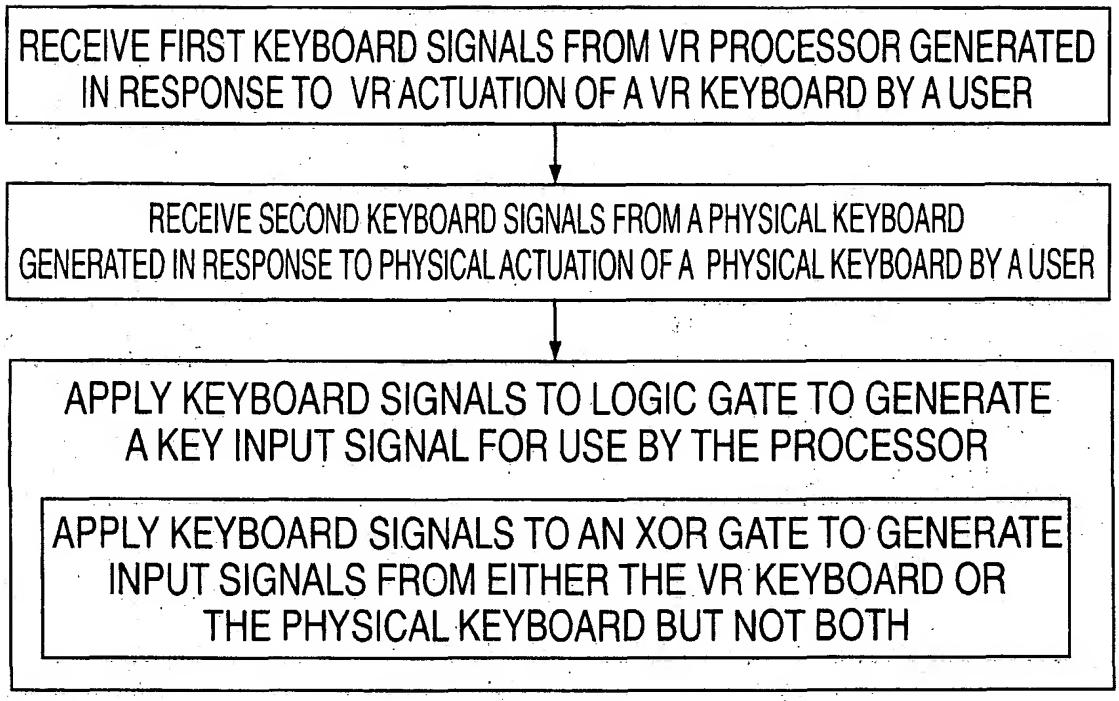
RECEIVE FIRST KEYBOARD SIGNALS FROM VR PROCESSOR GENERATED IN RESPONSE TO VR ACTUATION OF A VR KEYBOARD BY A USER
RECEIVE SECOND KEYBOARD SIGNALS FROM A PHYSICAL KEYBOARD GENERATED IN RESPONSE TO PHYSICAL ACTUATION OF A PHYSICAL KEYBOARD BY A USER
APPLY KEYBOARD SIGNALS TO LOGIC GATE TO GENERATE A KEY INPUT SIGNAL FOR USE BY THE PROCESSOR
APPLY KEYBOARD SIGNALS TO AN XOR GATE TO GENERATE INPUT SIGNALS FROM EITHER THE VR KEYBOARD OR THE PHYSICAL KEYBOARD BUT NOT BOTH

FIG. 41

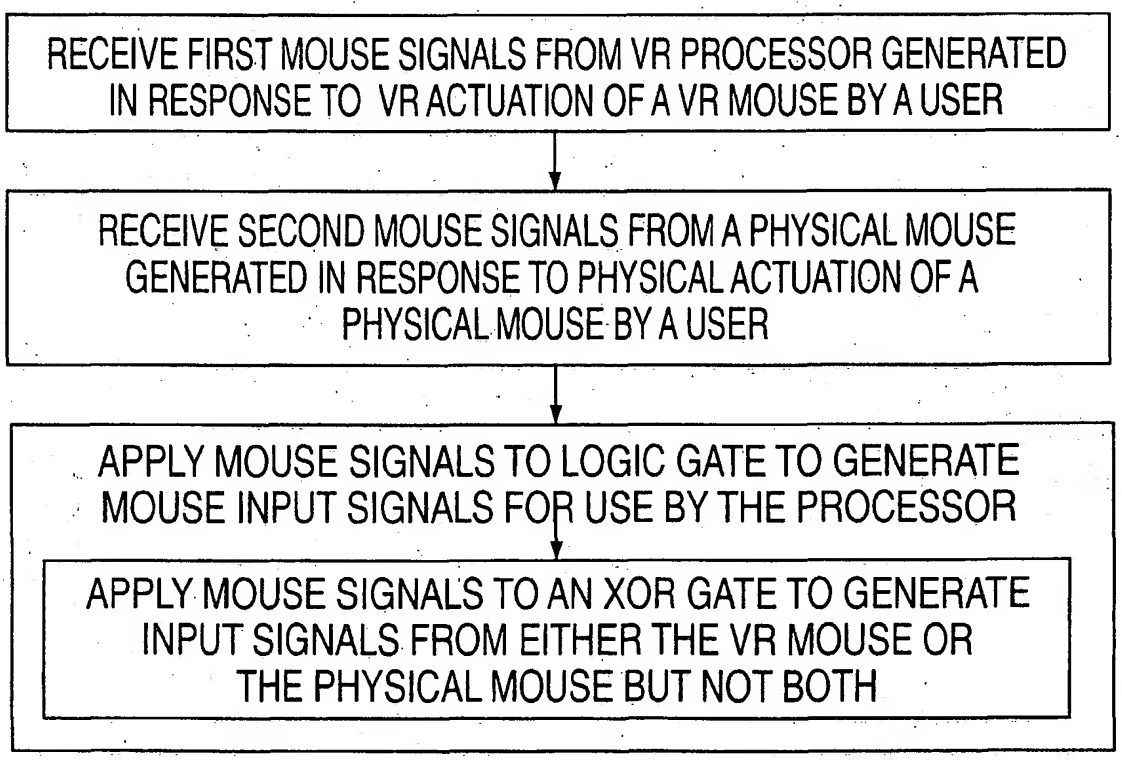
RECEIVE FIRST MOUSE SIGNALS FROM VR PROCESSOR GENERATED IN RESPONSE TO VR ACTUATION OF A VR MOUSE BY A USER
RECEIVE SECOND MOUSE SIGNALS FROM A PHYSICAL MOUSE GENERATED IN RESPONSE TO PHYSICAL ACTUATION OF A PHYSICAL MOUSE BY A USER
APPLY MOUSE SIGNALS TO LOGIC GATE TO GENERATE MOUSE INPUT SIGNALS FOR USE BY THE PROCESSOR
APPLY MOUSE SIGNALS TO AN XOR GATE TO GENERATE INPUT SIGNALS FROM EITHER THE VR MOUSE OR THE PHYSICAL MOUSE BUT NOT BOTH

FIG. 42

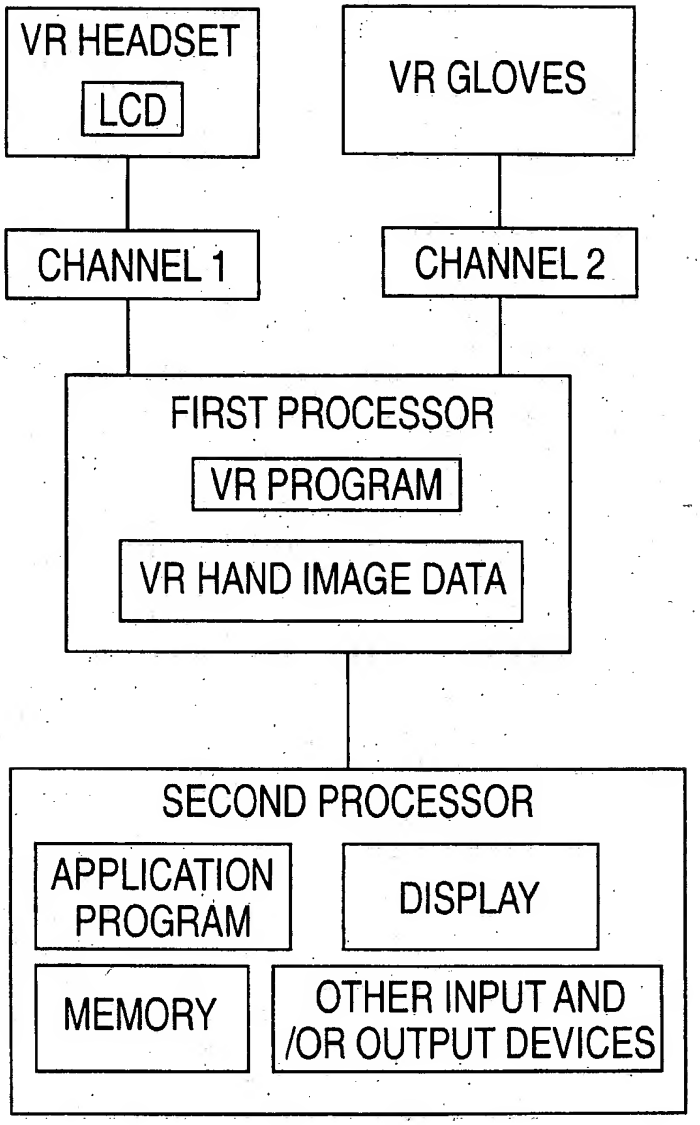
VR HEADSET
LCD
VR GLOVES
CHANNEL 1
CHANNEL 2
FIRST PROCESSOR
VR PROGRAM
VR HAND IMAGE DATA
SECOND PROCESSOR
APPLICATION PROGRAM
DISPLAY
MEMORY
OTHER INPUT AND /OR OUTPUT DEVICES

FIG. 43

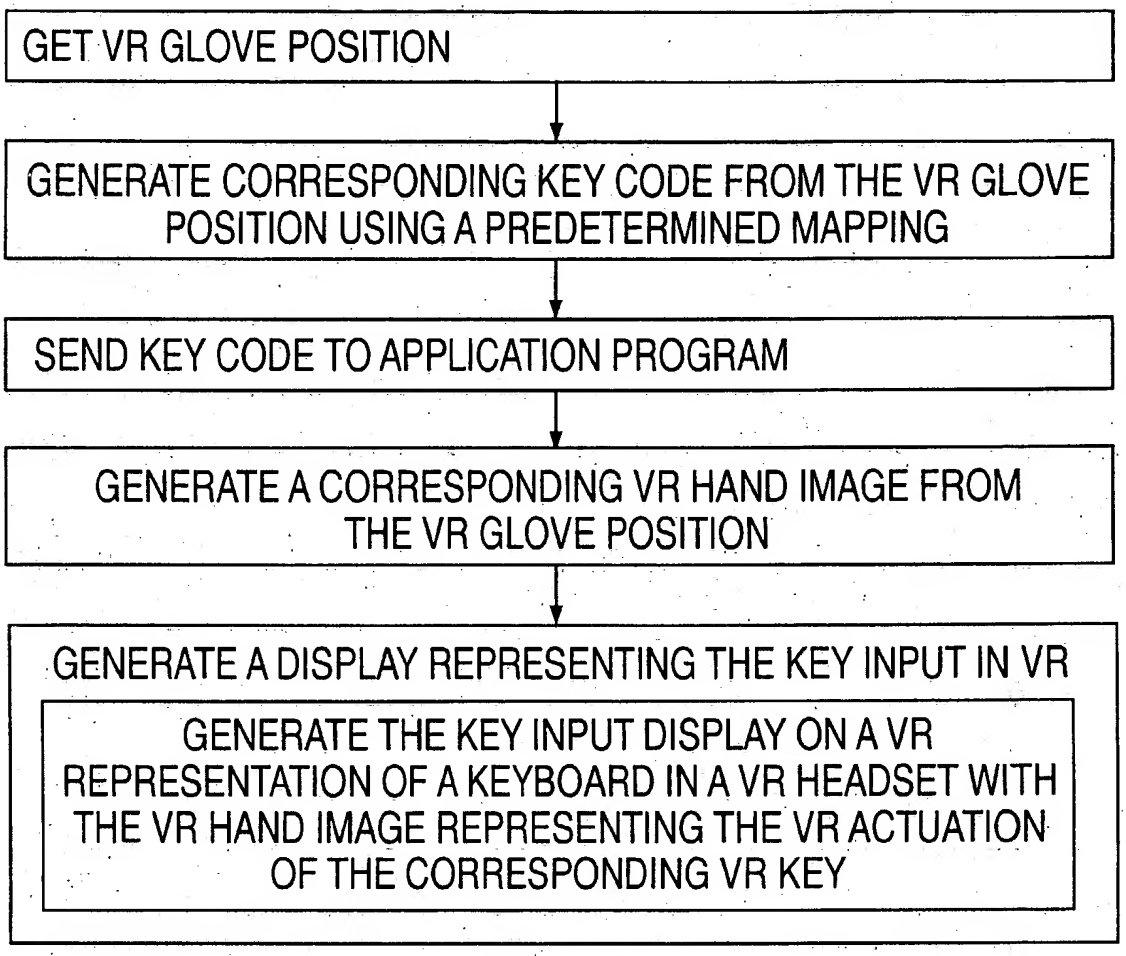
GET VR GLOVE POSITION
GENERATE CORRESPONDING KEY CODE FROM THE VR GLOVE POSITION USING A PREDETERMINED MAPPING
SEND KEY CODE TO APPLICATION PROGRAM
GENERATE A CORRESPONDING VR HAND IMAGE FROM THE VR GLOVE POSITION
GENERATE A DISPLAY REPRESENTING THE KEY INPUT IN VR
GENERATE THE KEY INPUT DISPLAY ON A VR REPRESENTATION OF A KEYBOARD IN A VR HEADSET WITH THE VR HAND IMAGE REPRESENTING THE VR ACTUATION OF THE CORRESPONDING VR KEY

FIG. 44

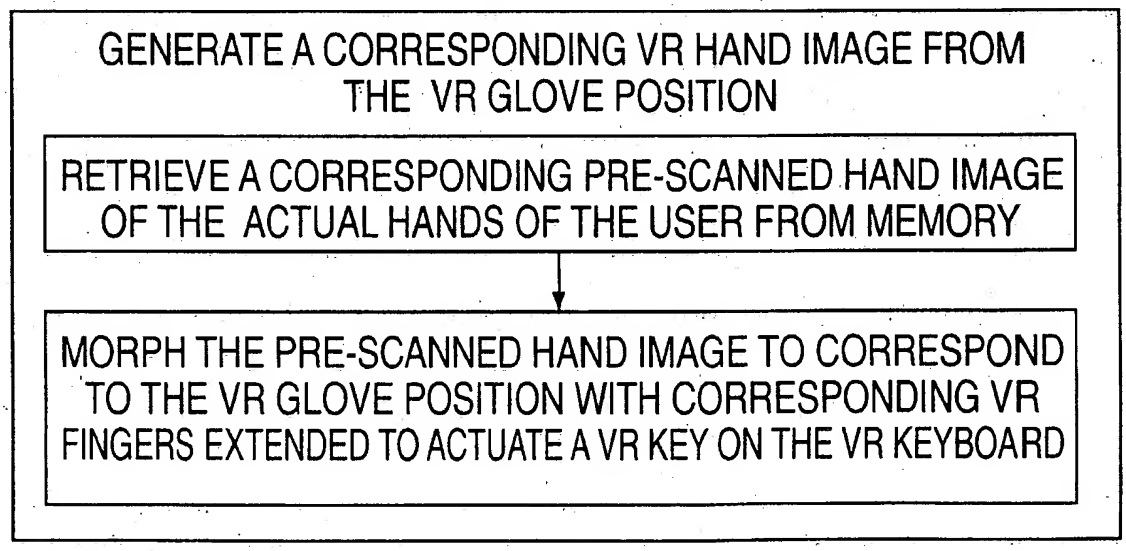
GENERATE A CORRESPONDING VR HAND IMAGE FROM THE VR GLOVE POSITION
RETRIEVE A CORRESPONDING PRE-SCANNED HAND IMAGE OF THE ACTUAL HANDS OF THE USER FROM MEMORY
MORPH THE PRE-SCANNED HAND IMAGE TO CORRESPOND TO THE VR GLOVE POSITION WITH CORRESPONDING VR FINGERS EXTENDED TO ACTUATE A VR KEY ON THE VR KEYBOARD

FIG. 45

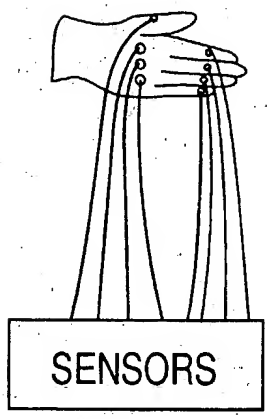

FIG. 46

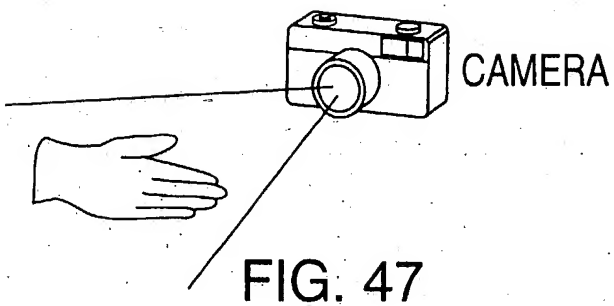

FIG. 47

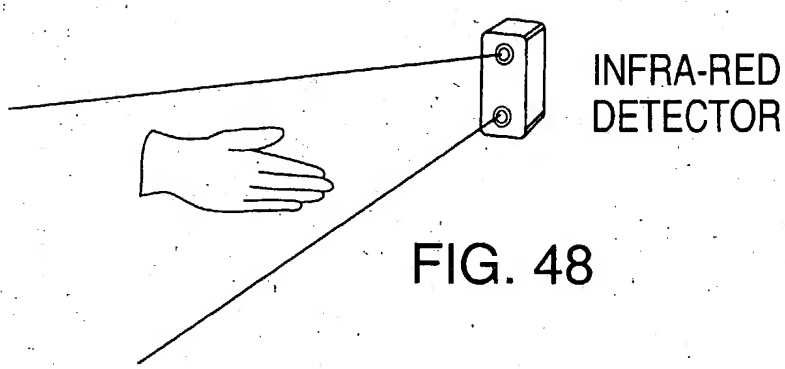

FIG. 48

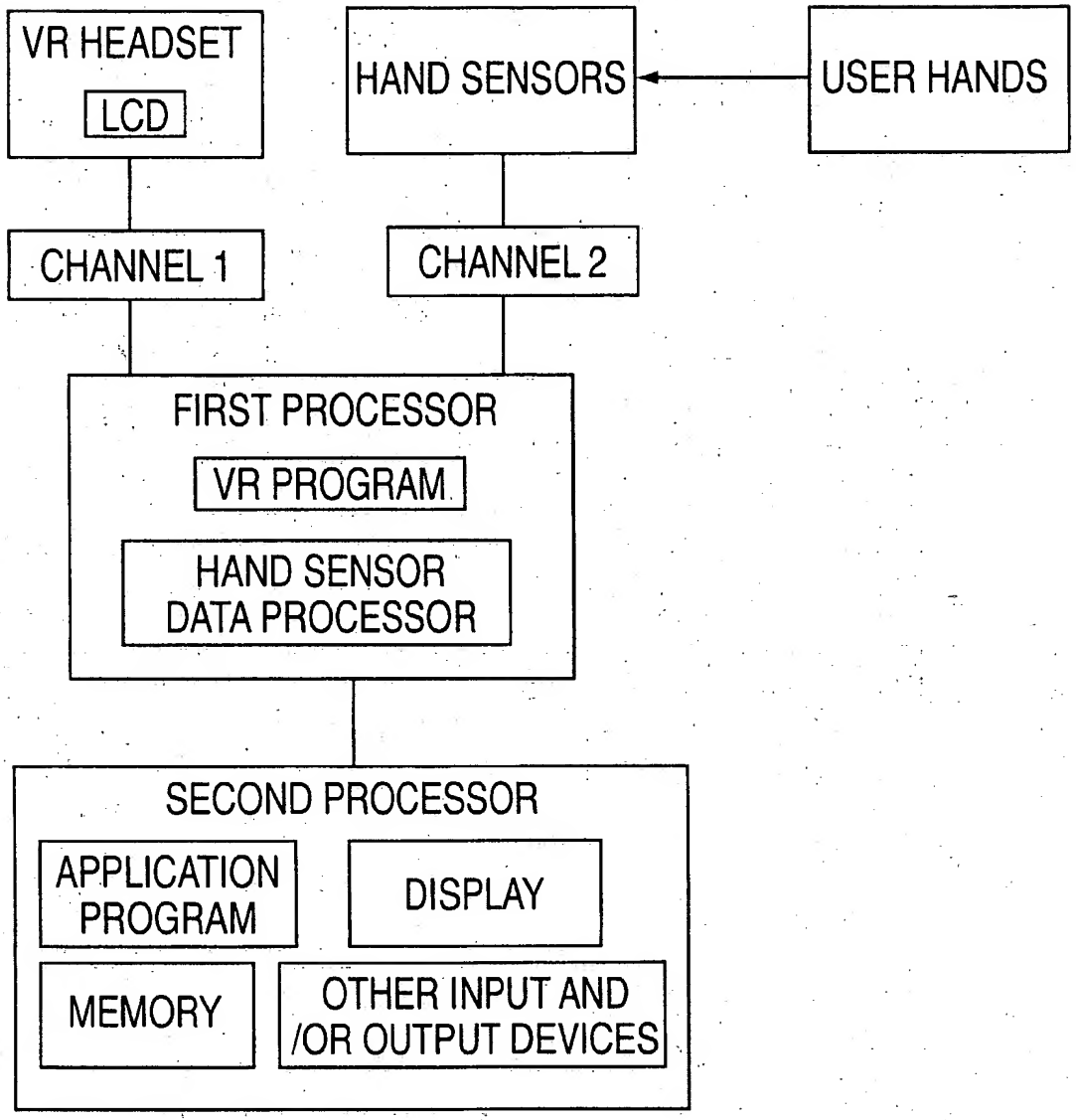
VR HEADSET
LCD
HAND SENSORS
USER HANDS
CHANNEL 1
CHANNEL 2
FIRST PROCESSOR
VR PROGRAM
HAND SENSOR DATA PROCESSOR
SECOND PROCESSOR
APPLICATION PROGRAM
DISPLAY
MEMORY
OTHER INPUT AND /OR OUTPUT DEVICES

FIG. 49

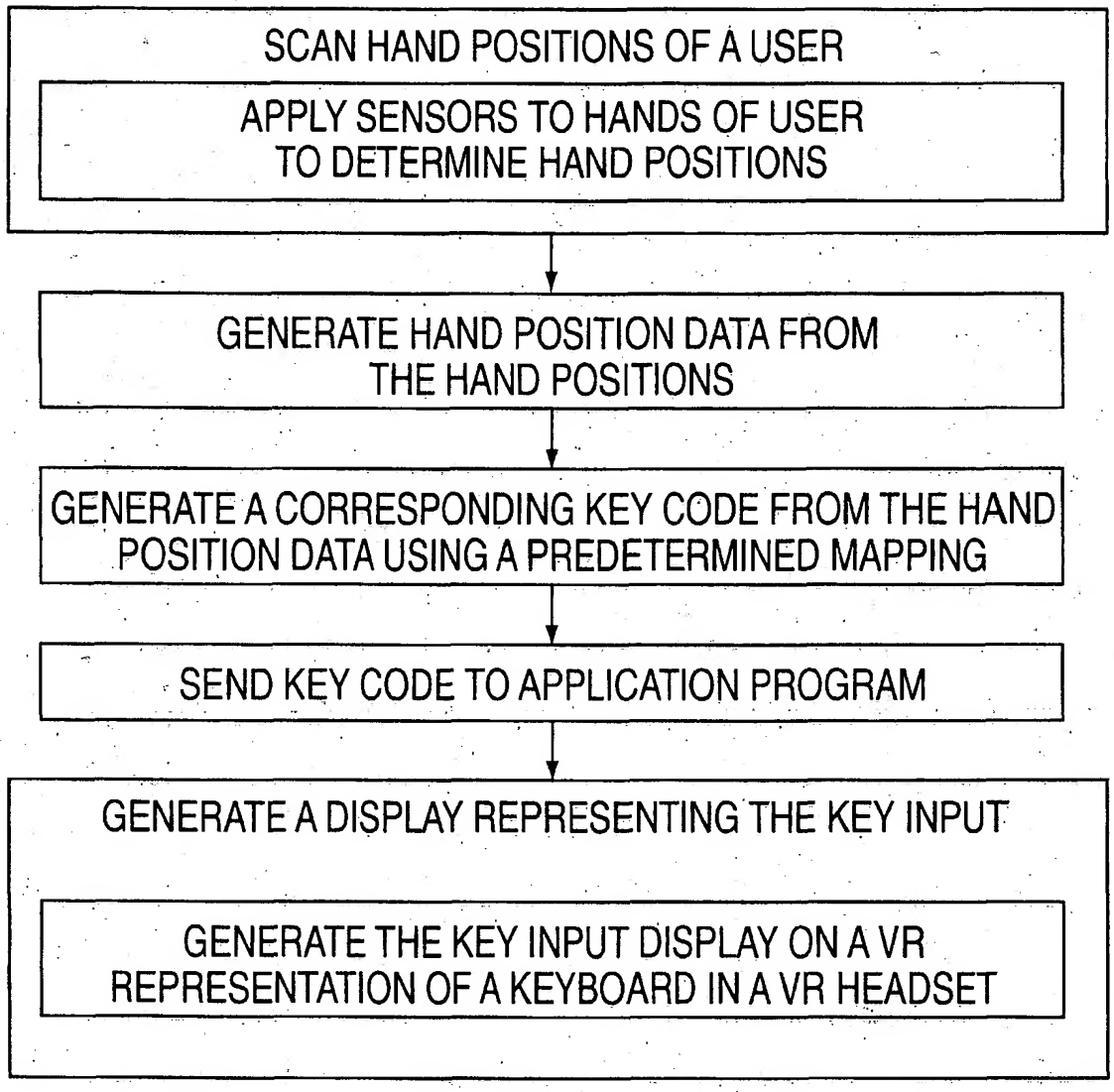
SCAN HAND POSITIONS OF A USER
APPLY SENSORS TO HANDS OF USER TO DETERMINE HAND POSITIONS
GENERATE HAND POSITION DATA FROM THE HAND POSITIONS
GENERATE A CORRESPONDING KEY CODE FROM THE HAND POSITION DATA USING A PREDETERMINED MAPPING
SEND KEY CODE TO APPLICATION PROGRAM
GENERATE A DISPLAY REPRESENTING THE KEY INPUT
GENERATE THE KEY INPUT DISPLAY ON A VR REPRESENTATION OF A KEYBOARD IN A VR HEADSET

FIG. 50